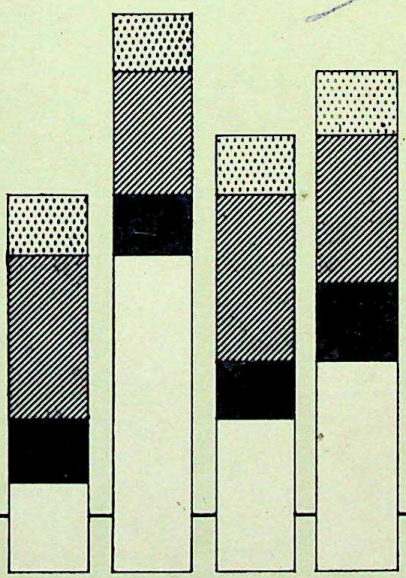
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Urban Decay in India

9928



R.S. Sharma

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The book focuses on the decline of towns and their desertion in late ancient and early medieval India on the basis of archaeological evidence. The author uses material remains to study crafts, commerce and coinage, and identifies and illustrates signs of growth and decay for more than 130 excavated sites. The strata with poor remains are taken to indicate decrease in construction, manufacturing and commercial activities, and are hence associated with de-urbanization. The reasons for the urban eclipse are sought not only in the fall of empires but also in social disorder and the loss of long-distance trade. The disintegration of the town life is seen not as social regression but as part of the social transformation which generated classical feudalism and promoted rural expansion. The book explores the link between urban decay and land grants to officials, priests, temples and monasteries. It shows how the landed elements collected surplus and services directly from the peasants, and remunerated artisan servicing castes through land grants and grain supply.

The monograph should interest students of pre-modern urban history and those who study processes of change in economy and society in Gupta and post-Gupta times. It may also provide basic information on the urban horizons of excavated sites during the second half of the first millennium BC and the following six centuries AD.

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Urban Decay in India

(c. 300 - c. 1000)





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Urban Decay in India

(c. 300 - c. 1000)

R.S. Sharma





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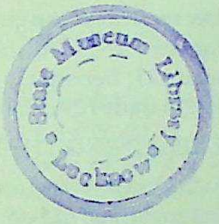
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Contents



List of Illustrations *vii*
Chart of Symbols Used in Sections *ix*
Preface *xi*
Acknowledgments *xiii*
Abbreviations *xiv*
Roman Equivalents of Nāgarī Letters *xv*

1. HISTORICAL ARCHAEOLOGY AND PROBLEMS OF URBAN HISTORY 1-9

   Search for foreign influence and art objects *1-2*; Historical archaeology de-emphasized *2-3*; Limitations of the archaeology of urban sites *3-4*; Identifying towns *4-8*; Problems of the urban eclipse *8-9*.

2. URBAN GROWTH AND DECAY IN THE NORTH 10-27

   The Kuṣāṇa phase and urbanism *10*; The case of Taxila *11-13*; Jammu and Kashmir *13-14*; Punjab *14-19*; Haryana *19-20*; Western Uttar Pradesh *20-27*.

3. URBAN GROWTH AND DECAY : THE MIDDLE GANGETIC PLAINS AND EASTERN REGIONS 28-59

   Eastern Uttar Pradesh *28-42*; North Bihar *42-50*; South Bihar *50-56*; Orissa *56-57*; West Bengal *57-59*; Assam *59*.

4. URBAN GROWTH AND DECAY : CENTRAL AND WESTERN REGIONS 60-83

   Rajasthan *60-62*; Madhya Pradesh *62-71*; Gujarat *71-74*; Maharashtra *74-83*.

5. URBAN GROWTH AND DECAY IN THE SOUTH 84-107

   Karnataka *84-87*; Andhra Pradesh *87-100*; Tamil Nadu *100-107*.

6. LITERARY AND EPIGRAPHIC SOURCES ON URBAN DECLINE 108-21

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Inscriptional evidence on the decline of trade and urbanism in Bengal *108-9*; The *Bṛhat Saṃhitā* material *109-14*; The *Kāvyas* and the Jain sources *114-17*; Texts on architecture *117-18;* Hsüan Tsang and Al-biruni *118-21*.

7. NATURE OF EARLY MEDIEVAL MONASTIC SETTLEMENTS 122-31

Decrease in urban elements *122-23*; Paucity of metal money *123-25*; Absence of artisanal and commercial seals *125*; Decrease in craft tools and craft work *125-29*; Fall in trade *129-30*; Marks of de-urbanization *130-31*.

8. EXPLAINING THE URBAN ECLIPSE 132-42

Fall of empires and foreign invasions *132-34*; Loss of long-distance trade *135-38*; The social disorder of the *Kali age 139-40*; Impact of land grants on towns *140-42*.

9. CONSEQUENCES OF DE-URBANIZATION 143-67

Generative role of early historic towns *143-51*; Fall in urban revenue and change in the nature of the army *151-52*; The fate of merchants *152-53*; Impact on artisans *153-55*; No distinction between the town and the country *155-57*; Parasitic non-agrarian settlements *157-60*; Migration of the brāhmaṇas *160-61*; Dependence of temples and monasteries on land *161-65*; New social and economic relationships *165-67*.

10. AGRARIAN EXPANSION 168-77

Rise of states in eastern, central and southern India *168-69*; Land grants and rural expansion *169-71*; Founding of villages *171-72*; Agricultural knowledge and technology *172-74*; Differentiation in the countryside *175-76;* Urban shrinkage and agrarian expansion *177*.

CONCLUSION 178-85

APPENDICES

Appendix 1: Towns in Gujarat/Malwa/Karnataka from where the Brāhmaṇas Migrated to Enjoy Land Grants in Gujarat 186-90

Appendix 2: Note on Diagram 191

Appendix 3: Note on Maps 198

Bibliography 199

Index 211

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List of Illustrations

Sections

Fig. 1. Sunet, section looking north trench D/SNT-2 after *IAR, 1983-84,* fig.7.

Fig.2. Schematic section across Ropar Mound 1953 after Y.D. Sharma, "Exploration of Historical Sites", *AI,* no. 9, 1953, fig. 3.

Fig. 3. Schematic section across Hastināpura Mound 1950-52, after B.B. Lal, "Explorations at Hastināpura and other Explorations in the Upper Gaṅgā and Sutlej Valley 1950-52", *AI,* nos. 10 & 11, 1954-55, fig. 2.

Fig. 4. Schematic section Atranjikherā Mound after R.C. Gaur, *Excavations at Atranjikherā,* Delhi, 1986, fig. 3.

Fig. 5. Mathura 1975-76 schematic section after M.C. Joshi (unpublished).

Fig. 6. Śrāvastī, 1959 (SRV-2) after K.K. Sinha, *Excavations at Śrāvastī, 1959,* Varanasi, 1967, fig. 3.

Fig. 7. Kauśāmbī 1957-59 section across guard-rooms on E 7 in G.R. Sharma, *Excavations at Kauśāmbī,* Allahabad, 1960, fig. 4.

Fig. 8. Rajghat 1960-61 RGT-11 (Mound-1) section looking north after A.K. Narain and T.N. Roy, *Excavations at Rajghat (1957-1958; 1960-1965),* pt. I, Varanasi, 1976, pp. 22-32, 39-40, fig. 4.

Fig. 9. Khairadih (KDH-3, E^2) 1982-83 after K.K. Sinha (unpublished).

Fig.10. Chirand, 1979-80, Trench No. C 1 after Basudev Narayana (unpublished).

Fig.11. Vaiśālī, 1959-60 VSG-XVII after B.P. Sinha and Sita Ram Roy, *Vaiśālī Excavations 1958-62,* Patna, 1969, fig. 9.

Fig.12. Katragarh KTG XI section facing north after Sita Ram Roy (unpublished).

Fig.13. Mahabir Ghat section looking north after B.P. Sinha and L.A. Narain, *Pāṭaliputra Excavation 1955-56,* Patna, 1970, fig. 3.

Fig.14. Rajgir 1950 section of the trench after A. Ghosh, "Rājgir 1950", *AI,* no. 7, 1951, Plate XXIX.

Fig.15. Champa 1978-79 Site No. 2C after Basudev Narayana (unpublished).

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Fig.16. Ujjain 1956-57 schematic section across Rampart and Moat at UJN-4 after *IAR, 1956-57,* fig. 10.
Fig.17. Nagara 1963-65 Mound 3 Trench IV after R.N. Mehta and D.R. Shah, *Excavation at Nagara,* Baroda, 1968, fig. 3.
Fig.18. Pauni 1969 section looking west after S.B. Deo and J.P. Joshi, *Pauni Excavation (1969-70),* Nagpur, 1972, fig. 4.
Fig.19. Bhokardan 1973 section facing east TR.E, MD-1, BKD after S.B. Deo and R.S. Gupte, *Excavations at Bhokardan (Bhogavardhana) 1973*, Nagpur, 1974, fig. 3.
Fig.20. Chandravalli section CH. 43 after R.E.M. Wheeler, "Brahmagiri and Chandravalli 1947: Megalithic and other Cultures in the Chitaldrug District, Mysore State", *AI,* no. 4, 1947-48.
Fig.21. Satanikota 1978 part of section A.B. after N.C. Ghosh, *Excavations at Satanikota,* New Delhi, 1986, fig. 28.
Fig.22. Kesarpalle 1962 section KSP-II after H. Sarkar, "Kesarpalle 1962", *AI,* no. 22, 1966, fig. 3.
Fig.23. Arikamedu: southern section AK IV section E-7 after R.E.M. Wheeler, A. Ghosh and Krishna Deva, "Arikamedu: An Indo-Roman Trading Station on the East Coast of India", *AI.* no. 2, 1946, plate XVII.

DIAGRAM

Life of Urban Phase at Excavated Sites. 192-97

MAPS

1. State of Urban Sites in the Indo-Gangetic Plains and Adjoining Areas
2. State of Urban Sites in the Indian Peninsula between 198-99

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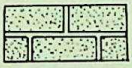
CHART OF SYMBOLS

USED IN SECTIONS

BURNT BRICKS
1. SECTION
2. ELEVATION



MUD BRICKS



LOOSE EARTH WITH GRAVEL etc.



LOOSE EARTH



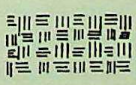
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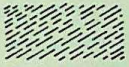
LOOSE CLAY



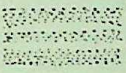
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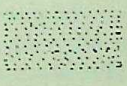
MUDDY BANDS



POTSHERDS



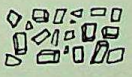
SAND



GRAVEL



BRICKBATS etc.



SURFACE HUMUS



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Preface

In the summer of 1983 I started to update and reorganize some of my published pieces for bringing out a complement to my *Indian Feudalism*. The process has given rise to the present book, which has grown out of a paper on the decay of Gangetic towns in Gupta and post-Gupta times published in 1972. The idea of urban decay was accepted and even developed by several scholars, but some questioned it, others pointed its regional variations, and still others debated its causes. In order to expand and reinforce my thesis I looked at the post-1970 archaeological data and read afresh the earlier reports. This has led to a survey of more than 130 excavated sites in the country. For the sake of clarity and convenience the signs of growth and decline for every excavated site have been identified separately. Yet instances of interrelationships between towns of different zones together with those of similarities and differences between them have been noted.

Vertical excavation has its limitations, yet even in a limited area the difference in the quality of cultural remains reveals the nature of settlement. A comparative view of the stratigraphic sequence in material culture at urban site enables us to follow the main trends in economy and society in late ancient and early medieval times. Such physical remains as signify artisanal and commercial activity involving exchange in metal money in an archaeological horizon lend urban character to it. But if remains betray marked decrease in size, structure and population, and particularly in trade, handicrafts and the use of metal money, they denote de-urbanization. I have tried to show that antiquities and artefacts from non-agriculturist settlements of early medieval times, when compared with those from ancient times, suggest the advent of feudal and religious traits.

Urban decay is viewed as an integral part of a new pattern of production marked by agrarian expansion. In the new set-up state officials and collectors of taxes give way to landed chiefs, vassals, brāhmaṇas, temples and monasteries, who directly collect surplus, services and goods from the peasants and artisans. Servicing and artisan castes are renumerated through land grants or in grain at harvest time, which leaves little scope for the operation of exchange economy and the performance of urban functions. Landed magnates dominate the organs of the state and accentuate social differentiation through subinfeudation.

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Since I am not a digger, in writing this book I have taken into account the difficulties of those who do not deal with archaeology. I will be happy to receive their reactions as well as those of archaeologists. Meanwhile I hope that the issues discussed in the book will be of interest to students of pre-modern urban history and to those who study the origins of early medieval social formations. It may also serve as a reference tool for those who seek basic information on the urban horizons of excavated sites in early historic times in India.

Delhi
June 1987

R.S. Sharma

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In writing this book I have received help from various people. Mr. R.K. Chattopadhyaya collected material for illustrations, and so did Dr. B.P. Sahu. Messers Vijay Kumar, V.S. Mani, Gyan Prakash, Bachchi Ram and Jassu Ram gave me technical assistance. Professor Suraj Bhan, Dr. H. Sarkar, Dr. A.K. Sinha, Professor K.K. Sinha and Professor P.D. Tripathi read the manuscript at various stages and made suggestions. Mr. J.P Joshi, Dr. C. Margabandhu and Dr. Sitaram Roy advised me on illustrations. Mr. Anil Kumar helped me in compiling the bibliography and Professor K.M. Shrimali took great care and pains in preparing the index. I express my gratitude to all these persons. My special thanks are due to the Jawaharlal Nehru Centre, Bombay, where I gave a talk in 1983 on Town and Country in the Early Middle Ages in India.

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Abbreviations

AI	*Ancient India*, New Delhi.
ARAD	*Annual Report of the Archaeological Department* by A.S. Gadre, Baroda State, 1938-39.
ARWM	*Annual Report of the Watson Museum*, Rajkot, 1922-23.
AŚ	*Arthaśastra* of Kauṭilya.
ASR	*Archaeological Survey (of India) Reports.*
BP	*Buddhi Prakash* (in Gujarati), Gujarat Vidyasthan, Ahmadabad.
CII	*Corpus Inscriptionum Indicarum*, London and Ootacamund.
CPSI	*A Collection of Prakrit and Sanskrit Inscriptions* ed. Peter Peterson, The Bhavnagar Archaeological Department, Bhavnagar.
HIG	*The Historical Inscriptions of Gujarat*, 2 pts, ed. G.V. Acharya, Bombay, 1933-35.
EI	*Epigraphia Indica*, Calcutta and Delhi.
IA	*Indian Antiquary*, Calcutta.
IAR	*Indian Archaeology – A Review*, New Delhi.
IHR	*The Indian Historical Review*, New Delhi.
IIBS	*Important Inscriptions from the Baroda State*, vol. I, by A.S. Gadre, Baroda, 1943.
JASB	*Journal of the Asiatic Society of Bengal*, Calcutta.
JIH	*Journal of Indian History*, Trivandrum.
JNSI	*Journal of the Numismatic Society of India*, Varanasi.
JUB	*Journal of the University of Bombay*, Bombay.
NBP	North Black Polished Ware
PGW	Painted Grey Ware.
PRAS, WC	*Progress Report of the Archaeological Survey, Western Circle.*
SBE	*Sacred Books of the East.*

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Roman Equivalents of Nāgarī Letters

अ	a	ए	e	क्	k	च्	c
आ	ā	ऐ	ai	ख्	kh	छ्	ch
इ	i	ओ	o	ग्	g	ज्	j
ई	ī	औ	au	घ्	gh	झ्	jh
उ	u	ऋ	ṛ	ङ्	ṅ	ञ्	ñ
ऊ	ū						

ट्	ṭ	थ्	th	ब्	b	व्	v
ठ्	ṭh	द्	d	भ्	bh	श्	ś
ड्	ḍ	ध्	dh	म्	m	ष्	ṣ
ढ्	ḍh	न्	n	य्	y	स्	s
ण्	ṇ	प्	p	र्	r	ह्	h
त्	t	फ्	ph	ल्	l		

Anusvāra ṁ

Visarga : ḥ



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1

Historical Archaeology and Problems of Urban History

The systematic excavation and exploration of historical sites is a little more than a century old. Students of urban history should feel grateful to early diggers and explorers for their work on the important cities and towns mentioned in ancient texts. They dug extensively and exposed many impressive structures. Alexander Cunningham, who worked as Archaeological Surveyor (1862-66) and again as Director General, Archaeological Survey of India (1870-85), identified several ancient sites, viz., Vaishali with Basarh and Nalanda with Bargaon. This process was continued by his successors. But because of the general orientalist image of India as a land of religion and spiritualism, strengthened by the publication of the accounts of the 'Buddhist' cities by the Chinese pilgrims, the diggers focused their attention on stupas, *caityas*, temples, monasteries, etc. They also doubted the creative ability of Indians to contribute to material culture. Writing on some ancient cities of India in 1945, Stuart Piggott spoke of the unchanging institutions and material culture of India. He says: "We do not find, and should not look for an inherent element of progress in Indian history — no organic evolution of institutions to changing human needs, no development of material culture nor the gradual spread of higher standards of living to a constantly increasing proportion of the inhabitants."[1] British archaeologists naturally looked for Iranian,[2] Greek[3] or Roman influence on Indian material culture, particularly on art and architecture. Moreover, because of their obsession with political and military history they searched for palaces and defence ramparts. Of this the report of L.A. Waddell in 1896 on Pāṭaliputra and that of D.B. Spooner in 1913-14 on Kumrahar are good examples.

Early European, mainly British, archaeologists were keenly interested in recovering sculptures and art objects of exotic and aesthetic value; many of them were removed to enrich the British Museum and other

[1] Stuart Piggott, *Some Ancient Cities of India*, pp. 1-2.

[2] For instance see D.B. Spooner, "The Zoroastrian Period of Indian History", *The Journal of the Royal Asiatic Society of Great Britain and Ireland*, 1915, pp. 63-82.

[3] Sir John Marshall's *Taxila*, 3 vols, overemphasizes Hellenistic influence although otherwise it is an excellent report.

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foreign collections. The Indian museums were considered to be storehouses of wonderful relics of the past. Little archaeological interest was shown in 'minor finds'[4] which, if carefully preserved and analysed, could have become of major importance for the study of urban life. Temples and monasteries were indeed preferred to the habitations of the ordinary town dwellers.

In the twenties and thirties of the present century Indian archaeologists became quite active, but working under British guidance they could not completely liberate themselves from the colonial stereotype. Through extensive excavations they salvaged a great deal of the country's cultural legacy, though much of it consisted of religious structures. Some archaeologists rightly argued against foreign influence, but together with historians they created some myths including the myth of the golden age of the Guptas.

Under Mortimer Wheeler (1944-48) the technique of area excavation was superseded by stratified excavation, in which the preparation of an overall, schematic view of the material culture assumed importance. Although Arikamedu was a single-culture site, Wheeler's search for Roman influence led to its stratawise excavation.[5] Similar diggings were started by his Indian disciples, and one could clearly see a town in terms of its origin, growth and decline.

During recent years historical archaeology has been de-emphasized because of a shift in orientation and direction for archaeological work. In the last twenty-five years there has developed a craze for prehistory and protohistory. Greater antiquity is supposed to vest the object and its discoverer with greater prestige and respectability. There is also the problem of making up for the loss of the main Harappan sites on account of the creation of Pakistan. Additionally there is the desire to establish the original home of the Aryans in India which has led to endless archaeological search.[6] These efforts have considerably added to information about the Stone Age, the stone-copper phase, the Harappan culture and the users of the Painted Grey Ware.

But this has been achieved at the cost of historical archaeology, which

[4] Reporting on Bulandibagh (Patna), Spooner says "The site is evidently rich in minor antiquities", *Annual Report of the Archaeological Survey of India, Eastern Circle, for 1914-15*, Superintendent's Report, Bankipore, 1915, p. 49; but he does not pay any attention to them.

[5] R.E.M. Wheeler with contributions by A. Ghosh and Krishna Deva, "Arikamedu: An Indo-Roman Trading Station on the East Coast of India", *Ancient India*, no. 2, 1946, pp. 17-124.

[6] R.S. Sharma, *Material Culture and Social Formations in Ancient India*, chs. 2,4 and appendix III.

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has been denied its due share in the limited resources and expertise available in the country. In the case of those sites which yield both prehistoric and historical remains, the former receives more attention in reports and discussions. Thus the importance of the neolithic-chalcolithic material including bone tools found in a few trenches at Chirand is blown out of proportion. Several Deccan and central Indian sites show both the chalcolithic and historical phases with a gap of nearly six hundred years between the two. Although the two phases are covered in the same report, more importance is given to the chalcolithic phase.

While ancient cities have received consideration in historical archaeology, the digging of rural sites lying in their periphery or elsewhere has been minimal. Since the difficulties of pre-industrial transport placed a town at the mercy of its hinterland, excavation at an urban site, unless backed by explorations and trial diggings in the adjacent areas, cannot disclose the nature of connection between a town and its supportive agrarian base.

The archaeology of medieval sites is sadly neglected, with the result that little is known about the life of the medieval settlements. In *Indian Archaeology 1982-83: A Review* the terms 'early historic', 'early medieval', 'medieval'and 'late medieval' have been used. This is certainly an advance on previous attempts at periodization, and brings archaeology closer to history. But what these terms mean by way of chronology, concept and content of material culture, remains to be clarified.

Finally, we may consider the relevance of horizontal excavations to urban history. Large-scale excavations can tell us about the size and population of a town. Of the Bronze Age sites, Mohenjo-daro was subjected to a large horizontal excavation; it was five times the size of Harappa. Considering the large number of early historic sites in the subcontinent, only Taxila, Kauśāmbī, Ahicchatrā and Nagarjunakonda were excavated on a large scale. Atranjikhera, Rajghat, Khairadih and Chirand have also been considerably excavated. But even a key site like Mathura has not been adequately excavated.[7]

[7] In view of the vastness of the country ancient Indian towns do not seem to be too many The Roman empire had nearly 1500 towns spread over Italy, the Iberian peninsula, the eastern provinces and the north African littoral excluding Egypt (Keith Hopkins, "Economic Growth and Towns in Classical Antiquity", *Towns in Societies*, Philip Abrams and E.A. Wrigley, ed., p.70) Although this index is considered imperfect, even a lesser number appears to be staggering when compared with India. It is likely that if we go only by archaeology the number of Roman towns will be much smaller. The Indian literary evidence is not helpful. Artistobulus, sent on a commission by Alexander to a region left desert by the shifting of the Indus to the east, saw the remains of over a thousand towns and villages full of men. The number may be exaggerated, but India and Pakistan will have to redouble their efforts to identify remains of those settlements. Indian archaeology also suffers from poor preservation. "Paved streets, life-size statues, shady colonnades, temples, gymnasia, baths, fountains,

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Despite these limitations, on the basis of earlier extensive excavations and recent vertical and horizontal diggings attempts have been made to write urban history. In an able monograph published in 1973 Amalananda Ghosh tried to tackle the problem of urbanization in early historical times.[8] He considered an administrative and mercantile organization to be the prerequisite for a city.[9] Ghosh was preceded by Y.D. Sharma, who had competently surveyed the remains of towns in 1953 and 1964.[10] Notwithstanding these laudable attempts, the problem of urban decline,[11] needs research.

Whether we study urbanization or de-urbanization, towns have to be identified. What could be the archaeological criteria for this? The classical definition of Childe lists monumental buildings, large settlements with dense population, non-food producing classes (including rulers, artisans and merchants) and the cultivation of art, science and writing as traits of the urban revolution[12] which took place in the Bronze Age. Childe laid great stress on the presence of craft specialists and the role of the surplus which supported non-food producers living in cities. According to Adams, increased size and density of population are crucial to urbanism, and the contribution of the specialized crafts to the primary urban needs is negligible.[13]

These ideas are largely useful even in the context of Iron Age towns in early historic India. But the presence of monumental buildings and the insignificance of crafts do not apply to early historic towns. Heavy rains, moist conditions and perennial floods rule out the presence of large constructions in many river plains. Indeed, there has been no dearth of towns

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theatres, amphitheatres, and aqueducts" constitute "the monument ruins of classical towns". But in contrast to these India's ancient urban monuments are pitifully poor.

[8] A. Ghosh, *The City in Early Historical India.*

[9] Ibid., pp. 20-21.

[10] Y.D. Sharma, "Exploration of Historical Sites", *AI*, no. 9, 1953, Special Jubilee Number, pp. 116-69; "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, A. Ghosh, ed.

[11] The problem receives some attention in R.S. Sharma, "Decay of Gangetic Towns in Gupta and Post-Gupta Times", *Proceedings of the Indian History Congress*, 33rd session, Muzaffarpur, 1972, pp. 94-104; B.D. Chattopadhyaya, "Trade and Urban Centres in Early Medieval India", *IHR*, I, 1974, pp. 203-19; "Urban Centres in Early Medieval India: An Overview", *Situating Indian History*, ed., S. Bhattacharya and Romila Thapar, 1986, pp. 8-33; R.N. Nandi, "Client, Ritual and Conflict in Early Brahmanical Order", *IHR*, VI, 1979-80, 103-9; V.K. Thakur, 1982, *Urbanisation in Ancient India;* Kameshwar Prasad, 1984, *Cities, Crafts and Commerce under the Kuṣāṇas.*

[12] V. Gordon Childe, "The Urban Revolution", 1950, Gregory L. Possehl, ed., *Ancient Cities of the Indus*, pp. 12-17.

[13] Robert McC Adams, "The Natural History of Urbanism", 1968, Possehl, ed., *Ancient Cities of the Indus*, pp. 18-26.

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with mud houses. In our view what really marks out a town is not merely size and population but the quality of material life and the nature of occupations. Though agrarian surplus derived from the hinterland is vital to the existence of a town, merely a settlement of non-agriculturists cannot be regarded as an urban centre. Concentration of crafts and prevalence of money-based exchange are equally important features of urban life. In texts on architecture a *nigama* or town is rightly defined as inhabited by people of all classes and numerous artisans.[14] According to Kaiyaṭa, a grammarian of the eleventh century, a city (*nagara*) is defined as a settlement which is surrounded by a wall and a moat, and is marked by the prevalence of the laws and customs of the guilds of artisans and merchants.[15]

We may now spell out in some detail the identity marks of a town primarily on the basis of archaeological data. The size of a settlement is an important consideration. A single mound or several contiguous mounds measuring one square mile may indicate a dense and large population. Since such measurements are generally not given in the reports, neither the size nor the population can be estimated. As far as I know, nobody has estimated the population of an early historical town although several estimates are made about the protohistoric Painted Grey Ware sites.[16]

The congestion of houses indicates dense population, but because of the limited area of excavation such exposures are very few. If the town is not situated on the river bank, the abundance of tanks and ring wells might suggest that water was needed by a large population. Ring wells used as soak-pits might suggest dense habitation. However excavations carried out so far do not help us much in this respect.

The numerical dominance of non-agriculturists is the distinctive feature of the urban population. The nature of iron and other artefacts that have been discovered in vertical excavations can provide some clue to the occupation of the people who used them. The artefactual assemblage holds the key to artisanal and other activities. Artefacts include not only axes, adzes, chisels, etc., but also crucibles, ovens, furnaces, dyeing vats, etc. Their social and economic implications have to be worked out. Fewer agricultural tools would mean a minor role for agriculture. Of course, hoes, axes, sickles, and adzes can be used in both crafts and agriculture. But far more importance needs to be given to the absence or the presence of the ploughshare. Towns may have been inhabited by some agriculturists,

[14] *Mayamata*, X, pp. 34-35; the term is *bahukarmakārayuktam*. Also see *Mānasāra*, X, p. 42, which reads as *bahukarmakarairyuktaṃ nigamaṃ tadudāhṛtam*. *Nigama* means a market-place or a company/caravan of merchants. s.v. *nigama*, Monier-Williams, *Sanskrit-English Dictionary*.

[15] *prākāraparikhānvitaṃ śreṇidharmasamyuktaṃ saṃsthānam*. Kaiyaṭa on Pāṇini, VII 3.14. I owe this reference to B.N.S. Yadava.

[16] Breham Dutt, "Settlements of the Painted Grey Ware in Haryana", unpublished Ph.D. thesis, Kurukshetra University, 1980.

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but their number would not be very large. However, as centres for manufactures of iron tools meant to cater to the primary needs of agriculturists, towns are expected to yield such artefacts. But much would depend on luck in vertical diggings.

Limited excavations make it difficult to locate craft and other specialists living in towns. But wherever kilns, ovens, furnaces, iron slag, coin moulds, moulds for beads, seals and sealings, jewellery, terracottas, etc. are exposed, they signify the presence of considerable craftsmen of different types. The same inference could be drawn from the finds of varied plentiful pottery.

Some signs of urbanism associated with early historic towns are not found in Harappan towns. Apart from the decipherable seals and inscriptions indicating the existence of organized and individual artisans and merchants (seals in Bhita, Vaishali and Paharpur), we also come across coins in excavated layers. The discovery of metallic money, when linked with the presence of artisans and traders, certainly lends a clear urban colour to such sites. Finds of coins indicate exchange of commodities through metallic money, and the occurrence of coin moulds have been reported from about three dozen early historic sites. The urbanism of seaside sites where dockyards or warehouses have been discovered is obvious. Arikamedu and Kaveripattanam are good illustrations.

Costly, prestige or luxury objects such as precious and semiprecious stones, sophisticated terracottas, thin-walled and shining pottery were apparently used by members of the upper class in historic towns. The same seems to be true of glassware, ivory objects and various types of Roman pottery discovered mainly in the sites situated south of the Vindhyas. Even the use of tiles for roofing may have been confined to richer sections of population. All this can be suggested on the basis of vertical excavations, which indicate the presence of a class of conspicuous consumers typical of pre-industrial towns. But what was luxury in ancient towns may have become necessity for the superior rural classes of early medieval times. Excavation of rural sites belonging to the early medieval period may throw light on this problem.

In Childe's view monumental buildings symbolize the consumption of the surplus, although they can also overawe commoners with the power and prestige of the rulers. But strangely such buildings have not been found in early historic towns. Burnt brick structures appeared around *c.* 300 BC and became important a century later. But it would be wrong to associate towns only with brick structures. In Central Asia a mud structure town was found in Afrasiyab. In India monumental structures of brick or stone became widespread in early medieval times, and they comprised forts, temples and monasteries. It is not known how populous they were. How they were supplied with food, artisanal goods and services is to be

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investigated. Considering the moist, rainy climate of many alluvial plains such as the middle Gangetic plains, baked brick structures on a good scale assume special importance and become a trait of towns. They can stand the moist much longer than unbaked brick constructions preserved in the dry climate of Central Asia, where mud structures alone can form towns.

At several places in the Deccan and elsewhere silos and granaries occur at historical sites. Apparently these silos were meant to store surplus foodgrains for feeding the urban people. We have no means to verify whether cereals were procured by the merchants or received as tax by the state agencies. At Dhulikatta (Andhra Pradesh) coins have been recovered from the granaries, which can connect them with the sale and purchase of foodgrains. At any rate, granaries indicate the dependence of the towns on the countryside from where such cereals were brought for storage.

Streets, shops, drains and fortifications could give a good idea of the urban settlement. Fortifications have been traced to some length in a few cases, but even the existing mud walls and baked ramparts indicate the need for security and partly satisfy the instructions given in the sections on *durganiveśa* or *durgavidhāna* in the *Arthaśāstra* of Kauṭilya. However in ancient times only seats of power and administration may have been enclosed.

Drains appear in many and streets in a few sites. Drains as well as sanitary arrangements suggest congested population. Brick-lined or cutcha roads and streets flanked by houses, as in Khairadih in Ballia district in eastern Uttar Pradesh, might indicate shops and the market. Clear indications of shops are found in Bhita.

Moving roughly from east to west to south, our criteria help us to identify many urban sites such as Chirand, Buxar, Khairadih, Mason, Sohgaura, Bhita, Atranjikhera, Kondapur, Vadgaon-Madhavapur, Arikamedu, etc. These have been excavated but are difficult to locate in texts. Moving in the same order, the texts mention many important towns such as Vaishali, Pāṭaliputra, Varaṇasi, Kauśāmbī, Sringaverapura, Śrāvastī, Hastināpura, Ahicchatrā, Mathura, Indraprastha, Ujjain, Bhogavardhana, Kaveripattanam, etc. These have not been excavated fully. Many of them are described by the Chinese pilgrims.

Those who consider size and density of population crucial to the urban set-up may find vertical excavation insufficient for identifying towns. But for us the quality of life revealed by specialized artefacts and objects used by the inhabitants is far more important than mere size. In a single-culture site, as in the case of many Kuṣāṇa, Kṣatrapa and Sātavāhana mounds, the vertical excavation could be a good clue to the nature of ancient life lived in the whole area covered by the mound. The same could apply to major culture sites. But here again a line has to be drawn between the types of material life lived in the rural areas and that lived in the urban

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areas. This can be delineated only if we make some progress in the archaeology of rural sites of early historical times. Villages mentioned in epigraphic land grants and identified in many cases could be taken up for excavation and exploration.

Meanwhile we may make the best of vertical excavations. If they suggest similar crafts and technology at sites which are far distant from one another, the phenomenon assumes a supra-local significance. Though not a happy method, an aggregate of the findings from vertical excavations at distant sites in the same cultural sequence would provide a general idea of urbanism. Again, if the traits of urban life revealed by vertical excavations at various sites tally with the traits exposed by horizontal excavations, this should be regarded far more significant.

By now nearly 140 urban sites have been excavated. Those dug according to Wheeler's method have been mostly reported in *Indian Archaeology: A Review*. But even at the end of their endeavours the excavators hardly care to favour the readers with an overall view of the site through schematic sections. The number of the available sections and the existing reports that clearly indicate urban decline in Gupta or post-Gupta times is not large. To infer de-urbanization from the desertion shown by vertical excavations may be criticized on the ground that the unexcavated parts of the mound could show habitation. But we have to rely on the digger who has a feel of the site. More importantly, when decline and desertion recur repeatedly at numerous sites they assume a pattern that cannot be ignored. Whether excavated vertically or horizontally, the overall outcome of vertical excavations is confirmed by the observations of Fa-hsien and Hsüan Tsang, who do not describe any particular part of the town but the town as a whole. The Chinese pilgrims speak of the decline of most Buddhist cities they visited in the fifth and seventh centuries.

The growth and decay of towns is intimately linked with the history of trade. The archaeological evidence for Indo-Roman trade is one-sided inasmuch as in sharp contrast to Roman goods found in peninsular India, only a few stray Indian objects are reported from the Roman empire. Hardly anything is reported from Roman Egypt and Western Asia with which India traded mainly. Of course Indian ivories of the first-second centuries AD have been unearthed in Begram (Afghanistan).[17] Similarly, though scientific examination of material remains can tell us about the existence of textiles, foodgrains, etc., commodities used in the two-way traffic between India and Central Asia under the Kuṣāṇas are not known.

A similar archaeological situation exists regarding India's trade with South-East Asia. The kaolin ware found in south Indian urban sites may

[17] Jeannine Auboyer, "Ancient Indian Ivories from Begram Afghanistan", *The Journal of the Indian Society of Oriental Art*, XVI, pp. 34-46.

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have been of Chinese origin, as is certainly the case with the celadon ware belonging to the ninth century or a later date. But only Indian beads of glass and of other materials have been found in excavations at some places in South-East Asia.[18] If South-East Asia actively traded with India between the fourth and tenth centuries we will need some proof in the archaeological record. As far is known, South-East Asian, and particularly the Indo-Roman trade, contributed substantially to the growth of towns in the peninsula till the third century AD. Once long-distance overland and overseas trade suffered, urban centres began to decline.

It is not necessary to define de-urbanization. If the concrete signs of urbanism that have been pointed out above are either wanting or found in a considerably diminished form at an urban site, we visualize urban decline. It raises several issues. How to account for this widespread phenomenon? Can it be explained only on the basis of internal dynamics of the Indian society? Towns were inhabited not only by rulers, soldiers and men of religion and learning but also by artisans, merchants and numerous servicing groups. If they declined what happened to townsmen and how did they earn their livelihood? Did urban decline affect the character of the ruling class and the state? What use was made of the skill of the artisans and how were they paid? How far did de-urbanization help agrarian expansion? To what extent and how long did merchants and traders replace their traditional callings with new ones? In what ways did such centres of non-agriculturists as temples, monasteries and fortified garrisons differ from early historic towns? Above all what was the nature of linkage between urban decline and the classical feudal set-up that emerged in the early medieval period? We will try to identify the signs of decline for every excavated site and also answer some of these questions.

[18] H.B. Sarkar, *Cultural Relations between India and Southeast Asian Countries*, ch. 11, p. 248. Numerous beads found in Malaya, eastern Java and northern Borneo are assigned to Roman, Hittite, Phoenician and south Indian sources from the pre-Christian centuries. The Indian bead trade continued in the early centuries of the Christian era, as the finds from Arikamedu or Virapatanam near Pondicherry and Oc Eo in Cochin China attest. What the Indian merchant received in return is not known.

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2

Urban Growth and Decay in the North

The study of urban settlements in Punjab, Haryana and western Uttar Pradesh in early historic times is beset with several difficulties. Although many sites have been explored, only a few have been excavated and that too, vertically. With the exception of Hastināpura only short reports of excavations have been published.[1] The report on Atranjikhera has been published in the form of a book, but it concentrates mainly on the Painted Grey Ware phase of the site.[2] Although Ahicchatrā and Mathura have been excavated extensively, full reports on these sites are not available. The advent of the early medieval phase in this area coincides with the rule of Harṣavardhana. But Thaneser and Kanauj, two centres of his power, have not been dug on any scale.

Despite various limitations on the basis of material remains we can reasonably identify the Kuṣāṇa phase, which was noted for its urbanism. Although urban elements appeared in the northern region in Maurya times and even earlier, they reached their peak under the Kuṣāṇas. For the first time the Kuṣāṇas issued numerous gold coins and minted large number of coppers that circulated for centuries. Numerous copper coins were also issued by other rulers and authorities. Terracotta coin moulds have been found in large numbers in the northern region, belonging roughly to the first three centuries of the Christian era. In this period manufacture of glass and ivory objects reached its zenith. Several iron crucibles and furnaces belong to this period, and the iron tools and implements are far more varied and numerous than those of earlier times. Śaka and Kuṣāṇa levels show large brick structures and also the first use of baked tiles for roofing and flooring. On the whole the material remains ascribable to the Kuṣāṇa phase display maximum urbanization in early historic times, but those belonging to the post-Kuṣāṇa or the Gupta phase are either non-existent or very poor. We will try to demonstrate this in the course of our survey of the sites in the northern region.

Although early historic towns in Pakistan have been excluded because of the non-availability of recent reports on them, we cannot ignore the

[1] B.B. Lal, "Excavation at Hastināpura and Other Explorations in the Upper Gaṅgā and Sutlej Basins", *AI*, no. 5, 1954 and 55, pp. 5-151.

[2] R.C. Gaur, *Excavations at Atranjīkherā*, Delhi, 1983.

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exceptionally rich report of John Marshall on Taxila. Identical with Takṣaśilā and situated twenty miles north-west of the modern city of Rawalpindi, it brought together three great trade routes; one from northern and eastern India; a second from Western Asia and a third from Kashmir and Central Asia.[3] The first Taxila was founded on an irregular plan in about the fifth century BC at the Bhir Mound, which measures about 12,000 yards from north to south, and 730 yards from east to west.[4] A good period of its settlement could be associated with the Maurya rule.[5] The second Taxila is identical with the Sirkap city, founded, north of the present-day Bhir Mound city, by the Bactrian Greeks in the second century BC. It was planned on a chess-board pattern typical of Greek towns; excluding some suburb, its walls were nearly 3.5 miles long.[6] The third Taxila city, now called Sirsukh, dates from Kuṣāṇa times, and is laid out as a traditional Central Asian city.[7] Situated north of Sirkap city, it is roughly a parallelogram with a perimeter of about three miles.

Apart from these three cities the Taxila area is littered with numerous Buddhist stupas and monasteries, of which the most impressive is the Dharmarajika stupa.[8] The city of Sirsukh[9] and the monasteries seem to have been deserted by the fifth century AD.

Although excavations show continuous urban life in Taxila from the fifth century BC to the fifth century AD, urbanism reached its peak in Sirkap between the second century BC and the second century AD when the Śakas and Parthians[10] developed it under Hellenistic influence. The excavated portion of its main street measures 2000 feet from north to south.[11] On both sides it is flanked by a row of shops, which are small single-storey structures of one or two rooms.[12] Shops are interspersed with shrines and at the back of both large houses belonging to the rich are situated.[13] They cover, on an average, some 15,000 sq.ft.[14] There are two palaces in Sirkap, one in the Lower City and the other situated on a high ground between the rocky ridges on the extreme western end of the Hathial spur called 'Mahal'; the remains of this residence, exposed so far, cover an area of 310 feet north and south and 240 feet east and west.[15]

Structures are mainly made of limestone blocks, and occasionally of bricks.[16] Many soak-pits existed in Bhir Mound, but sanitary arrangements were poor at Sirkap.[17] It is not clear how sewage was disposed,[18] though drain pipes have been found.[19]

Antiquities, classified as Indian, Greek and Western Asiatic,[20] give a

[3] Sir John Marshall, *Taxila*, I, p. 1. [4] Ibid., p. 3. [5] Ibid. [6] Ibid., p. 4.
[7] Ibid. [8] Ibid. [9] Ibid., p. 221. [10] Ibid., p. 118.
[11] Ibid., pp. 119-20, 197-98. [12] Ibid., p. 140. [13] Ibid., p. 141. [14] Ibid.
[15] Ibid., p. 214. [16] Ibid., p. 200. [17] Ibid. [18] Ibid.
[19] *Taxila*, II, p. 429. [20] *Taxila*, I, p. 200.

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splendid idea of urban life at Sirkap. The city significantly contributed to artisanal production. This is attested by carpenters' and metal workers' tools; moulds and stamps for stamping of pottery and textiles; and metal dies for fashioning of coins and ornaments.[21] The production equipment also include coin moulds,[22] crucibles,[23] bellow-pipes,[24] and a metal workers' portable furnace.[25] Various seals of semiprecious stones and numerous ornamental beads made of glass occur.[26] As many as 1763 beads including those of glass were found at Bhir Mound and 5534 at Sirkap.[27] There is no doubt that glass beads and tiles were manufactured at Taxila.[28] Toilet articles include copper/bronze mirrors, combs made of bone and ivory, and toilet-trays made of stone.[29] Flesh rubbers are found at both Sirkap and Bhir Mound.[30] Together with toilet accessories a magnificent collection of gold and silver jewellery[31] indicates the presence of an affluent class. Household utensils are mostly of earthen ware.[32] They include some wine amphorae from Mesopotamia.[33] More strikingly, vessels of copper and bronze, and sometimes also of silver, iron and stone appear.[34] Large copper cooking pots[35] are notable finds. Wheeled braziers for moving fire from room to room occur.[36] Pens and inkpots made of clay and metal are also found.[37] Grinding mills, which seem to be an innovation, are found.[38] The list of these antiquities, though not exhaustive, is enough to establish that Sirkap was a leading centre of diverse crafts.

Long-distance trade is attested not only by the find of red sandstone[39] from Mathura but also by that of Roman amphorae. Central Indian connection can also be detected.[40] Coins and coin moulds are the most important relics of Taxila's ancient trade and exchange. Clay coin moulds, with the impress of six to twelve coins in each, were used not only by the authorized minters but also by the forgers.[41] Taxila was an important mint centre.[42] Out of a total of 7665 coins recovered from Sirkap nearly ninety-six per cent come from the late Śaka-Parthian levels. They include the old punch-marked, local Taxilan, Greek and early Śaka issues as well as the

[21] Ibid., pp. 202, 205. [22] *Taxila*, I, p. 177; II, p. 462. [23] *Taxila*, II, p. 425.
[24] Ibid., pp. 424-25. [25] Ibid., p. 424. [26] *Taxila*, I, pp. 203-4.
[27] H. Sarkar, "Growth of Cities in Āndhradeśa", Presidential Address, Tenth Andhra Pradesh History Congress, Guntur, 1986, unpublished, p. 21.
[28] Ibid., p. 207. [29] Ibid. [30] Ibid., pp. 202, 205. [31] *Taxila*, II, p. 425.
[32] Ibid., pp. 205-6.
[33] Ibid., p. 20. Two-handled amphorae were copies of Hellenistic or other shapes, p. 206.
[34] Ibid., p. 206. [35] Ibid. [36] Ibid., p. 207. [37] Ibid., p. 207; II, p. 598.
[38] *Taxila*, II, p. 486. [39] Ibid., p. 207.
[40] A squatting *kumbhāṇḍa* (dwarfed bellied figure) holding an animal in his left arm "may in fact have been brought from Central India", *Taxila*, II, p. 441.
[41] Ibid., pp. 177-78. [42] Ibid., pp. 768, 778-79.

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late Śaka, Parthian and Kuṣāṇa ones.[43] If we examine the dynastic types and those of every king, these coin types will run into several hundreds. For instance, as many as forty-two types of Śaka coins are mentioned.[44]

The late Kuṣāṇas moved to Sirsukh, a slightly irregular rectangle, measuring nearly 1500 yards along its northern and southern sides and 1100 yards along its eastern and western sides.[45] Only a part of Sirsukh was excavated, and finds from its fortifications were very few and of little interest.[46] However the finds[47] suggest that it does not compare well with Sirkap. Nevertheless considering the small area of excavation coins were numerous.[48]

Marshall holds that the Hūṇas destroyed Sirsukh city and Buddhist monuments,[49] which is partly supported by the nature of human remains[50] and partly by the vast amount of burnt earth lying in the cells and courtyard of the Bhamala monastery. The fire which destroyed this city must have been very fierce.[51] Marshall concludes that the wholesale destruction of the Buddhist stupas and monasteries took place in the last quarter of the fifth century.[52] But he also underlines the fact that Taxila lay at the convergence of three great trade routes to which it owed its initial existence and subsequent prosperity; he adds that "when trade contacts with foreign countries were interrupted Taxila sank eventually into insignificance".[53]

Marshall's report clearly suggests that Taxila ceased to be an urban centre after the fifth century. The coins of Sirkap virtually terminate with the advent of Vima Kadphises(II). There has not been done much excavation at Sirsukh, but the sites of adjacent monasteries and stupas have yielded copious Kuṣāṇa coppers with Indo-Sassanian and medieval coins.[54] Some chance coins of Kashmir rulers between *c.* 750 and *c.* 1000 have been found,[55] but they belong to strata after *c.* 1000 and show the latest habitations.[56] Of course some coins of the Hindu princes of Ohind occur.[57] But both coins and structures show the post-fifth-century Taxila to be a derelict site. According to Marshall, Hsüan Tsang stayed in Sirsukh, where numerous structures of the early medieval period are still traceable.[58] But these were Buddhist monuments,[59] and give no indication of any urban character. However most of the Taxila *sanghārāmas*, including the monastery at Kuṇāla's stupa, were destroyed by hostile invasion.[60]

Explorations made in Jammu and Kashmir have brought to light a large

[43] *Taxila*, I, p. 210. [44] *Taxila*, II, pp. 771-72. [45] *Taxila*, I, pp. 217-18.
[46] Ibid., p. 218. [47] Ibid., pp. 220-21. [48] Ibid., p. 221.
[49] Ibid., pp. xvi, 285, 288f, 387, 393, 395. [50] Ibid., p. 288.
[51] Ibid., p. 395, cf.p. 352. [52] Ibid., p. 397. [53] Ibid., pp. 1-2.
[54] *Taxila*, II, p. 834. [55] Ibid., p. 794. [56] Ibid. [57] Ibid.
[58] *Taxila*,I, p. 348. [59] Ibid., pp. 348ff. [60] Ibid., pp. 351-52.

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number of Kuṣāṇa sites. Twenty-three such single-culture sites have been found in Jammu district.[61] They are neither preceded nor succeeded by any other culture. The Kuṣāṇa deposits are mostly followed by the occupation yielding Muslim glazed ware.[62] More Kuṣāṇa sites followed by the late medieval period are reported from the same district.[63] Many Kuṣāṇa sites have been explored in the district of Baramula,[64] and generally such settlements show interruption in occupation until the advent of the early or the late medieval period.[65] Although the reports do not date the early medieval period, explorations clearly suggest desertion of most settlements after the third century AD or so.

An excavated site, Semthan, situated forty-eight km from Srinagar, in Anantnag district, had its 'early historic period' marked by a brick pavement and a stone drain.[66] The two periods following the NBP phase show several floors, coins, terracotta beads and figurines, and a clay sealing besides iron and copper objects.[67] Period V or the last phase of occupation is ascribed to the time of prolific temples and sculptures in Kashmir.[68] The chronology of these periods is not fixed, but period V covers Gupta and post-Gupta times when the site acquired a predominantly religious character.

Numerous settlements were founded in Punjab under the Kuṣāṇas and abandoned with the end of their rule. Twenty-one explored Kuṣāṇa sites in Ludhiana fall in this category.[69] Some are single-culture sites, and the others indicate a gap between the Kuṣāṇa and the 'medieval'[70] or the Muslim period in the traditional sense.

Explorations have brought to light ten sites in Phillaur tahsil of Jalandhar where the Kuṣāṇa red ware is followed by 'Muslim' glazed ware.[71] Three of these sites show only Kuṣāṇa and 'Muslim' wares, and the remainder seems to be associated with a much earlier occupation.[72] If we go by the size of the mounds at least two of them can be called towns.[73]

In the district of Ludhiana at the excavated site of Sanghol the post-Gupta period is represented by thin occupation in one of the trenches, which yields pre-Mughal glazed ware and other finds.[74] But as a whole the listed finds mostly pertain to Kuṣāṇa times. We find coins of the Indo-Parthians, Kuṣāṇas and semi-tribal states. A terracotta coin mould of Gondophernes[75] suggests that Sanghol was a mint town. Sanghol is particularly noted for numerous beautiful pieces of Kuṣāṇa sculpture in white-spotted red sandstone characteristic of the Mathura school. No such

[61] *IAR, 1980-81*, pp. 23-26. [62] Ibid. [63] *IAR, 1981-82*, pp. 18-19.
[64] Ibid., pp. 16-17. [65] *IAR, 1977-78*, p. 24. [66] *IAR, 1980-81*, pp. 21-22.
[67] Ibid. [68] Ibid. [69] Ibid., pp. 46-49. [70] Ibid.
[71] *JIH*, XLV, p. 568. [72] Ibid. [73] Ibid., pp. 564-65.
[74] *IAR, 1968-69*, p. 26. [75] Ibid.

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pieces are reported from the Gupta period. Whatever we know about the Gupta period is inferred from deposits belonging to the defence complex, which is attributed to *c.* AD 50-500 by the excavator.[76] The deposit against the raised wall yielded the red polished ware, terracotta female figurines of the Gupta age, and a fifth-century Gupta Brāhmī seal.[77] All this might suggest Gupta habitation, but the excavator does not mention any Gupta structures. In contrast to the pre-Gupta phase the Gupta levels are thin, and habitation dwindles after the Gupta period. The medieval period or the post-1200 period is represented by a thick but disturbed deposit yielding glazed ware sherds, associated red ware and other antiquities.[78] Evidently decline set in at this site in Gupta and especially in post-Gupta times. Afterwards there seems to be no sign of occupation till *c.* 1000.[79]

Recent cuttings at the site demonstrate that it flourished till early Kuṣāṇa times, decayed in late Kuṣāṇa and Gupta days and was abandoned in post-Gupta times. The 'early historical' Sanghol had six structural phases, which did not go beyond the Indo-Parthian or the early Kuṣāṇa phases.[80] Both baked and unbaked bricks were in use. Vases with stamped designs appeared. Beads and terracotta animal figurines were found. We also notice semiprecious stones and ivory combs.[81] Coins of Gondophernes and Vima Kadphises were found.[82] Some coins of Soter Magas were also obtained.[83] A stupa probably belongs to early Kuṣāṇa times.[84] This complex contained monastic cells, and yielded a copper chisel and ninety-two tiny barrel-shaped gold beads.[85] It seems that in Kuṣāṇa times Sanghol was a thriving town.

The mound on the eastern side of the village, Sanghol, perhaps occupied in Kuṣāṇa times, shows in Gupta times baked brickwork and a few sealings.[86] It seems that the settlement declined in Gupta times and disappeared in post-Gupta days.

Sunet in Ludhiana district entered the phase of urbanization around 200 BC, and continued to be a full-fledged town until AD 300. Extensive habitational constructions of this period appear in three trenches of the site marked SNT-I and SNT-II. In all SNT-II shows seven structural phases. Seven structural phases also appear in fourteen trenches at SNT-I which has store rooms and an elaborate drainage system.[87] Some mud-brick houses seem to be servant quarters.[88] Sprinklers occur. Besides beads and bangles of terracotta, bone dice and ivory bangle pieces appear. Inscribed terracotta seals and sealings of the Kuṣāṇa period have also been found.[89]

Sunet is really famous for the largest hoard of coins. Although excavation

[76] *IAR, 1970-71*, pp. 30-31. [77] *IAR, 1969-70*, p. 32. [78] Ibid. [79] Ibid.
[80] *IAR, 1977-78*, pp. 43-44. [81] Ibid., p. 43. [82] Ibid., p. 44. [83] Ibid.
[84] Ibid. [85] Ibid. [86] Ibid. [87] *IAR, 1983-84*, p. 69. [88] Ibid.
[89] Ibid.

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has yielded copper coins, coins of Kuṣāṇa kings Vāsudeva and Huviṣka and moulds of medals.[90] The most important is the surface find of a hoard of thirty thousand coin moulds bearing the legend *yaudheyagaṇasyajaya*,[91] victory to the Yaudheyas. At site no.4 surface exploration brought a large number of seals, sealings, coin moulds and moulds for the manufacture of ornaments. The presence of thirty thousand moulds presupposes not only the existence of a mint house at Sunet but also a unit for the manufacture of coin moulds. If we visualize the number of coins that could be turned out with thirty thousand moulds, it would mean the wide prevalence of money economy in Ludhiana district and the adjacent regions.

The period *c.* 300-600 seems to have been without constructions. It shows 'red polished ware of the Gupta period'.[92] We also come across some terracotta seals of the same age.[93] But, overall, the Gupta period at Sunet is a phase of sharp decline.

Period VI AD 600-800 showed a large number of 'Kota' coins and dull red-slipped pottery.[94] The houses were constructed of reused bricks. Antiquities included ivory bangle pieces, and beads of semiprecious stones.[95] But obviously it was a phase of decline, as would appear from the report. This period was not represented in SNT-II.[96] (Fig. 1).

At Ghuram in Patiala district urban life lasted from the second century to the first century BC. Audumbara coins and coin moulds of Menander seem to have been in use there.[97] Apparently Ghuram was a mint town. The mud-brick structures probably include the house of a goldsmith.[98] They contain large storage-jars, corn bins and a sealing with a Brāhmī legend.[99] Various types of ceramics suggest habitation up to the first century AD.[100] But the excavator does not mention anything between the first century AD and the 'early medieval' period when we encounter a fortified town.[101] This is followed by the 'Muslim period'.[102]

Ropar in Ropar district is noted for the find of coins of the pre-Gupta phase. A mould prepared from a coin of Apollodotus II, an Indo-Greek ruler, was found in addition to many Mathura and Audumbara type coins.[103] Structures were absent, but a large hoard of over six hundred copper coins, mostly Kuṣāṇa, was found. In coins the Gupta phase is represented only by a gold issue of Candra Gupta I.[104] A set of three silver utensils meant for some ritual use shows craftsmanship of those times. Several terracotta sealings belong to the fifth-sixth centuries.[105] After that we notice a break which lasted for more than two centuries.[106] The site was

[90] Ibid., pp. 69-70. [91] Ibid. [92] Ibid., p. 69. [93] Ibid., pp. 69-70.
[94] Ibid. [95] Ibid. [96] Ibid., p. 68. [97] *IAR, 1976-77*, p. 44.
[98] Ibid. [99] Ibid. [100] Ibid. [101] Ibid.
[102] Ibid. [103] *IAR, 1953-54*, p. 7. [104] Ibid. [105] *AI*, no. 9, p. 126.
[106] Ibid.

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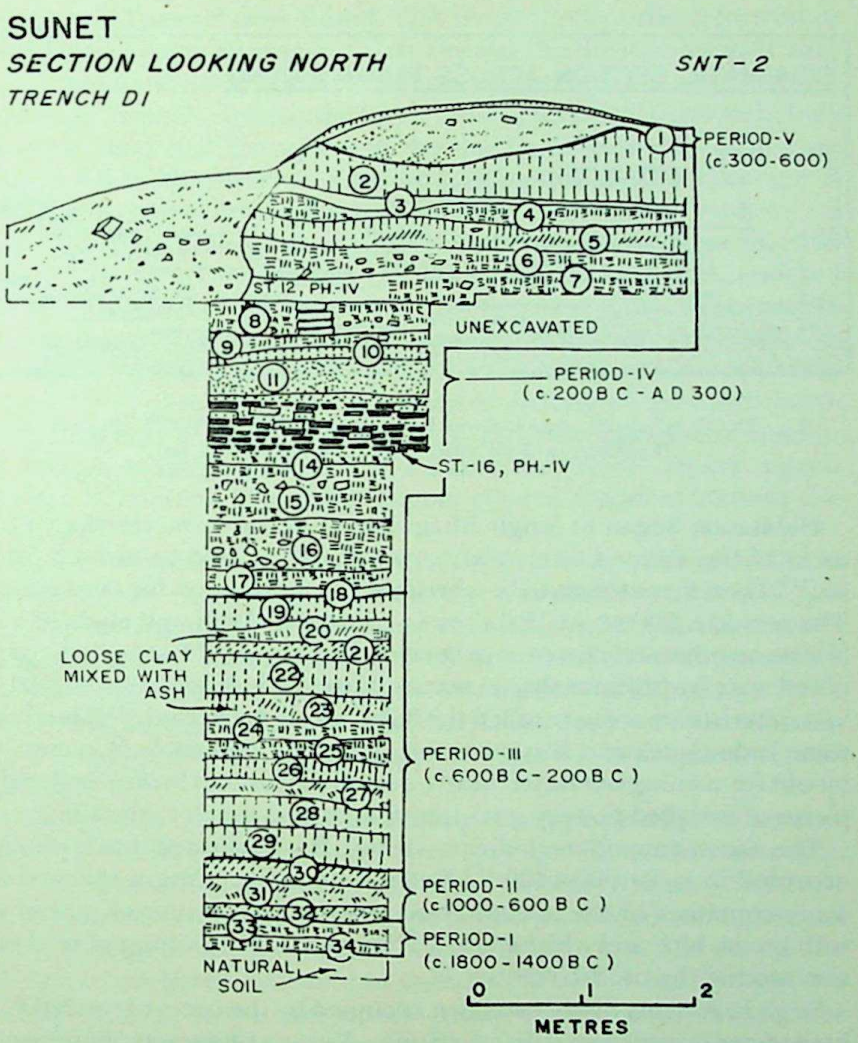


FIG. 1. Sunet, section looking north trench D/SNT-2 after *IAR, 1983-84*, fig. 7.

again occupied in about the ninth century, but now the habitation was confined to the southern part of the city.[107] Spacious brick buildings of this occupational phase are associated with prosperity.[108] Although the period is dated *c.* AD 800-1000, it does not have any clearly datable objects,[109] probably the period started later. In any case there is again a break of about three hundred years after the end of this period.[110] (Fig. 2).

[107] Ibid. [108] Ibid., p. 124. [109] Ibid. [110] Ibid., pp. 124, 126.

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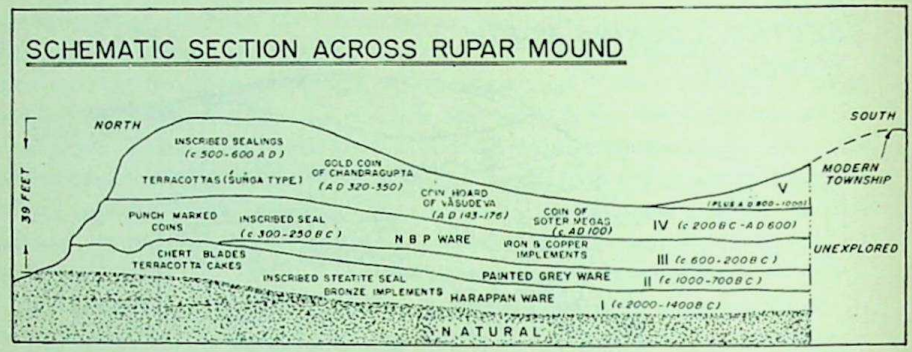


FIG. 2. Schematic section across Ropar Mound 1953 after Y.D. Sharma, "Exploration of Historical Sites", *AI*, no. 9, 1953, fig. 3.

Habitation began at Singh Bhagwanpur in the same district with the users of the Painted Grey Ware around 700 BC and continued till 400 BC.[111] Then there seems to be a break in the occupation for two centuries. The period *c.* 200 BC-AD 200 shows a 1.80 metre high wall made of baked bricks; no other structures have been noticed so far.[112] But a good quantity of red ware in different shapes occurs. Vases with shoulders stamped with 'characteristic' motifs are called the hallmark of the period.[113] The finds of some Indo-Greek and Kuṣāṇa coins, terracotta skin rubbers, a terracotta mould for turning out fluted beads, a small perforated bronze bell and two pieces of so-called pottery stamps give an urban touch to the site.[114]

The site was abandoned after *c.* AD 200. It is suggested that it was again occupied in *c.* AD 900-1400.[115] But the finds including a *chilam* (bowl), water-container of the hookah, large inkpot, and pieces of glazed ware with green, blue and white enamel[116] suggest the beginning of re-occupation around the twelfth century.

Sugh in Ambala district was first occupied by the users of the NBP. The limited excavation shows that the Śuṅga-Kuṣāṇa phase was not impressive except in terracotta. It was rich in Śuṅga-Kuṣāṇa terracotta pieces which distinguish many town sites in north India.[117] We notice terracotta animal figurines, bull-headed bottle-stoppers of copper, beads of semiprecious stones, and a few uninscribed cast copper coins.[118] All these finds taken together may indicate some elements of urbanism. About 1.6 km to the west of the site remains of a large rectangular burnt-brick structure of the

[111] *IAR, 1980-81*, pp. 50-51. [112] Ibid., p. 51. [113] Ibid. [114] Ibid.
[115] Ibid. [116] Ibid. [117] *IAR, 1963-64*, pp. 27-28
[118] Information from Professor Suraj Bhan.

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'early historical period' were found. This seemed to be either a fortress or an enclosure of some monastery.[119] At any rate the site was deserted after the early historical period, probably in the third century.

At Bara in Ambala district, the lower datable historical deposits belong to Kuṣāṇa times and the upper to the 'medieval' period.[120] The term 'medieval' probably refers to the period starting with the establishment of the Sultanate. At any rate Gupta deposits have not been reported.

Agroha in Hissar district developed elements of urban culture in *c.* 100 BC-*c.*AD 400. Structural remains include both baked and unbaked bricks.[121] The late Kuṣāṇa to the early Gupta period shows five phases in brick structures.[122] However the houses were constructed of reused bricks of the earlier period.[123] Bowls, sprinklers and a carinated *hāndī* appear in red ware.[124] An inscribed Brāhmī terracotta sealing of the third-fourth century AD occurs. Further, a terracotta toy-cart, disc, gamesmen, moulds; shell and glass bangle pieces; and semiprecious stone objects suggest urban life. In addition to iron and copper objects, copper coins have also been found.[125]

The place seems to have lost its character of town after early Gupta times. Of the two temples found here, one was probably built in Gupta times, but its circumambulatory path was made mostly of brickbats.[126] Though this temple continued from the fourth to the eleventh century,[127] the post-Gupta structures of this site do not seem to be impressive. A few pieces of sculpture in Gurjara-Pratīhāra style were recovered from its last phase.[128] Apparently the place ceased to be urban in Gupta and post-Gupta days.

With a break in occupation after the late Harappa phase, Daulaṭpur in Kurukshetra district seems to have been continuously under occupation from PGW times till its final desertion in early medieval times.[129] Its 'early historical period' is distinguished by the typical pottery, including the red polished ware of the early centuries of the Christian era. The period also shows terracotta beads, wheels and dabbers, balls, and animal figurines including those of horse and camel. Beads of glass and semiprecious stones as well as bangles of glass and shell occur. Iron objects include sickles, fragments of blade, ring and a figurine of a bird. A few copper coins have also been recovered.[130] The following period has some pottery and a

[119] *IAR, 1963-64*, p. 28.

[120] *IAR, 1954-55*, p. 10. There is some confusion in reporting, which covers both Bara and Salaura, but it seems that Salaura had only medieval structures.

[121] *IAR, 1978-79*, pp. 68-69; *1979-80*, p. 31. [122] *IAR, 1978-79*, p. 69.

[123] Ibid. [124] Ibid., p. 68; *1979-80*, p. 31. [125] *IAR, 1979-80*, p. 31.

[126] *IAR, 1980-81*, pp. 15-16. [127] Ibid. [128] Ibid. [129] *IAR, 1968-69*, p. 9.

[130] *IAR, 1976-77*, p. 19; *1977-78*, p. 23.

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few iron objects.[131] Excavations for three seasons show that the site was abandoned after Gupta times.

Raja Karna Ka Qila at Kurukshetra in the same district was occupied from 400 BC to AD 300, and the last period starting from the Christian era yielded red polished ware, early historic copper coins, and various household iron objects. It showed seven structural phases generally in mud bricks, but had burnt bricks in upper levels.[132] The excavator does not refer to any post-AD 300 antiquities.[133] Several excavations confirm that the site remained deserted till late medieval times.[134]

Excavations at Purana Qila in New Delhi show signs of flourishing habitation in the Kuṣāṇa period. The Śaka-Kuṣāṇa period was distinguished by structures of baked bricks. It yielded remains of systematically built brick structures showing 4-5 phases. We notice a brick-paved floor inside a house.[135] The red ware consisted of Kuṣāṇa bowls and sprinklers, and other finds included copper coins of the Mathura kings, Kuṣāṇas and Yaudheyas.[136] Crucibles, skin rubbers, and an ivory handle were also found.[137] Although remains of brick structures covered three to four phases in the Gupta period, the houses were constructed out of the reused bricks of the earlier phase.[138] The post-Gupta period had a few structures, some with sagging walls made of reused bricks, and red ware was its main pottery.[139] Though its structural remains in burnt bricks formed three phases, the bricks were used mostly in fragments and had been robbed from earlier houses on the site.[140] The Rajput period revealed five structural phases of both reused bricks and mud bricks, and a fortification wall.[141]

In western Uttar Pradesh eighteen sites explored in the districts of Meerut and Muzaffarnagar show that the red ware of Kuṣāṇa times was succeeded by medieval pottery. Some mounds are quite large,[142] and they might represent the remains of towns. Fifteen explored sites in the district of Saharanpur are credited with the Śuṅga-Kuṣāṇa ware followed by the medieval ware.[143] Explorations in the districts of Etah, Bulandshahr and Moradabad have brought to light many sites where early historic red ware is followed by 'medieval' ware.[144] In the district of Etawah at Chakannagar Kheda, situated on the right bank of the Yamuna, sherds of PGW, NBP wares as well as terracotta figurines of the early Christian era were found.[145]

[131] *IAR, 1977-78*, p. 23. [132] *IAR, 1970-71*, p. 16. [133] Ibid.
[134] *IAR, 1971-72*, pp. 23-24; *1972-73*, p. 12; *1975-76*, p. 18. [135] *IAR, 1970-71*, p. 10.
[136] *IAR, 1969-70*, p. 5. [137] *IAR, 1970-71*, p. 10.
[138] *IAR, 1969-70*, p. 5; *1970-71*, p. 10. [139] *IAR, 1969-70*, p. 5; *1970-71*, p. 10.
[140] *IAR, 1970-71*, p. 10. [141] Ibid., p. 11. [142] *IAR, 1962-63*, pp. 36-37.
[143] *IAR, 1964-65*, p. 44. [144] *IAR, 1970-71*, p. 37. [145] *IAR, 1969-70*, p. 40.

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Hastināpura, which is a famous Painted Grey Ware site in the district of Meerut, shows exclusively red ware industry in *c.* 200 BC-AD 300. In this phase seven structural subperiods contain houses made invariably of burnt bricks. They show regular house planning oriented roughly along cardinal direction.[146] This period has yielded coins of the rulers of Mathura belonging to the second century BC, those of the Yaudheyas belonging to the Christian era, and imitation coins of the Kuṣāṇa king Vāsudeva of *c.* AD 250. The Gupta antiquities, generally assigned to the period AD 300-700, are absent in Hastināpura.[147] The site was abandoned in the fourth century, and continued to be so till the eleventh century. (Fig. 3).

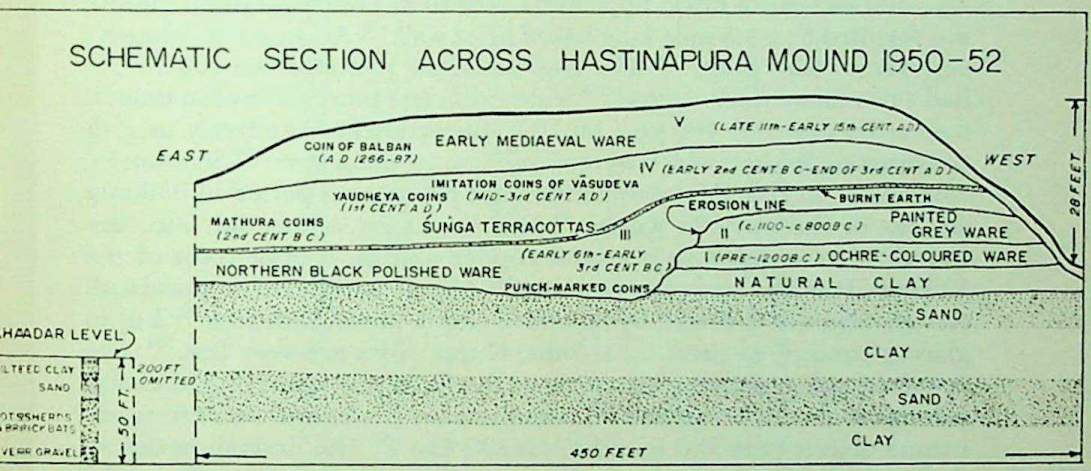


FIG. 3. Schematic section across Hastināpura Mound 1950-52, after B.B. Lal, "Explorations at Hastināpura and other Explorations in the Upper Gaṅgā and Sutlej Valley 1950-52", *AI*, nos. 10 & 11, 1954-55, fig. 2.

The Atranjikhera mound in Etah district, one of the four biggest mounds in Uttar Pradesh,[148] does not show a break in occupation after the fourth century, but the deposits attributed to the period *c.* AD 350-1100 are much thinner than those ascribed to the period *c.* 50 BC-*c.* AD 350.[149] It was clearly a period of rapid decline. This can be said on the basis of the excavation of a major portion of the mound which measured 3700 × 1350 feet.[150]

[146] *AI*, nos. 10-11, Table 1, facing p. 12; from "Summary of the Results". [147] Ibid.

[148] R.C. Gaur, *Excavations at Atranjikherā*. The other three similar mounds are Sankisa (Farrukhabad district), Ahicchatrā and Kauśāmbī.

[149] Ibid., p. 9, see schematic section. [150] Ibid., p. 1

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The excavator's monograph on Atranjikhera shows that it had become urban in the NBP phase, but his report practically ends with *c.* 50 BC. We however learn that the site yielded antiquities belonging to Śuṅga, Kuṣāṇa and Gupta times,[151] but those pertaining to Gupta times are practically negligible.[152] Nevertheless some 'excellent sculptures' are attributed to the Guptas.[153] Significantly enough the period 200 BC- AD 300 contains red ware as well as many terracottas. It also has an interesting house-complex of burnt bricks in conjunction with the constructions of the previous period. A coin mould from the Kuṣāṇa layer is a significant find from this place.[154] (Fig. 4)

Ahicchatrā, the capital of north Pañcālas, located in Bareli district, emerged around 300 BC as a sizeable settlement with mud brick buildings. The first kiln-burnt bricks appeared in the first century BC when the city was fortified by a 3.5 mile long baked brick wall.[155] Around this time several 'Mitra' coins occur.[156] The Kuṣāṇa-Gupta period, *c.* AD 100-350,[157] had a two metre thick deposit,[158] which indicates more habitation than in the earlier period (*c.*100 BC-*c.*AD 100). Burnt bricks were freely used in constructing houses, which were aligned on cardinal lines.[159] Stratum IV covering *c.* AD 100-350 "marked the most prosperous period of building activity in the city".[160] Kuṣāṇa bowl, sprinkler, inkpot lid, etc., are found.[161] In addition to iron and copper objects, copper coins of the Kuṣāṇas, Pañcālas, and of Acyu occur.[162] Acyu is considered identical with Acyuta who was defeated by Samudra Gupta around AD 350.[163] But in glaring contrast to pre-Gupta coins, Gupta coins are very few.[164] The inscribed seal containing the name of the *bhukti* (division) of Ahicchatrā belongs to the Gupta period.[165] Semiprecious stones and numerous terracotta objects were also found in AD 100-350.[166] The finds show that in Kuṣāṇa and early Gupta times Ahicchatrā flourished as a town.

It is held that in the context of the Gangetic plains forming the heart of the Gupta empire the material remains of the Gupta period are scarce at Ahicchatrā.[167] At any rate the urban character of the site suffered after the mid-fourth century. A temple complex and large brahmanical clay images appeared in *c.* AD 350-750. Construction in this period included the ruins of an apsidal temple and also an upper temple with three shrines and

[151] V.K. Mathur, *Aitihāsik Sthānāvalī* (in Hindi), p. 18. [152] *IAR, 1962-63*, p. 34.
[153] R.C. Gaur, op. cit., p. 10, fn. 1. [154] Information from Dr. P.L. Gupta.
[155] Y.D. Sharma, "Exploration of Historical Sites", *AI*, no. 9, p. 137; A. Ghosh, *AI*, no. 1, p. 37.
[156] Ibid., p. 138. [157] Ibid. [158] *IAR, 1963-64*, p. 44. [159] Ibid.
[160] *AI*, no. 1, p. 39. [161] *IAR, 1963-64*, p. 44. [162] Ibid.
[163] *AI*, no. 9, p. 140. [164] K.M. Shrimali, *History of Pañcāla*, I, p. 117.
[165] Ibid., p. 21. [166] *IAR, 1963-64*, p. 44. [167] K.M. Shrimali, op. cit., p. 117.

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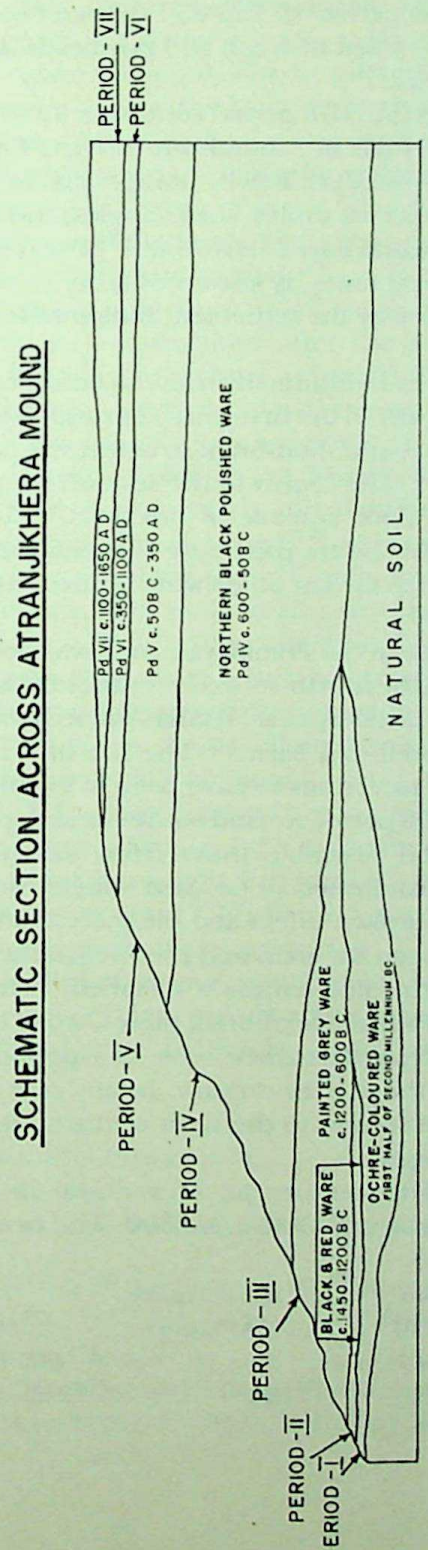


FIG. 4. Schematic section Atranjikherā Mound after R.C. Gaur, *Excavations at Atranjikherā*, Delhi, 1986, fig. 3.

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ancillary structures.[168] The period AD 750-850 showed two poor residential houses and several pits filled with ash and potsherds. It did not yield any definitely datable object.[169]

Habitation starting with the NBP period continues up to the end of the Śuṅga-Kuṣāṇa period at Hulas in Saharanpur district. The later period shows spouted jars, lids, sprinklers, bowls, storage-jars, etc. Besides copper coins, beads of semiprecious stones, shell bangles, and beads, bangles and sealings made of terracotta have been found.[170] The following period, called Gupta-early medieval times, is known only for some painted and moulded pottery.[171] Obviously the settlement sank into insignificance in the Gupta period.

Virbhadra in Rishikesh in Dehradun district was occupied from the second to the eighth century AD. In the first-third centuries, sprinklers of red polished ware, bowls, vases and mud-brick structures appear.[172] Kuṣāṇa copper coins also occur.[173] The fourth to the seventh century phase has brick structures, but the floor is made of brickbats.[174] It has a Śaivite sanctum, and may probably be credited with two temples. Temples and other structures are found in the last phase which ended in the eighth century.[175]

Ranihat in Tehri district in the Himalayan zone was occupied around the sixth century BC.[176] In the fourth-second centuries BC, brick structures with floorings paved with bricks appear. Wedge-shaped bricks suggest the construction of either a well or a barn.[177] The size of bricks indicates a Maurya-Śuṅga horizon. Iron seems to have been in extensive use in this period.[178] In 200 BC-AD 200 period we find bottle-necked sprinklers; miniature vases of the period resemble those from western and central India.[179] Although iron continued to be used widely, floors and other structures were made of broken bricks and tile pieces. Several phases of structure are placed between the sixth and the twelfth century AD by the excavator, but only one undated temple is specified.[180] It may be noted that floorings were generally made of brick pieces, stone chips and occasionally of bricks robbed from the earlier levels. The period of these structures came to an end in the twelfth century. In any case the site wore a deserted look during the second to the sixth century AD, and the early medieval structures were poor.

Inhabited since the fifth century BC Moradhwaj in Bijnor district acquired urban character in *c.* 200 BC-*c.* AD 300. The pre-Kuṣāṇa phase

[168] *AI*, no. 1, p. 39; no. 9, p. 140. [169] *AI*, no. 1, p. 39. [170] *IAR, 1978-79*, p. 71.
[171] Ibid. [172] *IAR, 1973-74*, p. 28; *1974-75*, p. 41. [173] *IAR, 1973-74*, p. 28.
[174] *IAR, 1973-74*, p. 28; *1974-75*, p. 41. [175] *IAR, 1974-75*, pp. 41-42.
[176] *IAR, 1978-79*, p. 75. [177] Ibid. [178] Ibid. [179] Ibid.
[180] Ibid.

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shows baked brick structures, fortification walls, terracotta beads, cart wheels and figurines. Copper bangles and iron tools are also found.[181] Baked brick structures continued to be put up in the Kuṣāṇa phase, and a brick temple was erected in the heart of the settlement of Kuṣāṇa times.[182] The Buddhist association of the site is indicated by the remains of a stupa and numerous small tablets bearing the image of the Buddha.[183] The earlier finds continued in a large measure,[184] and apart from typical Kuṣāṇa ceramics, a gold coin of the Kuṣāṇa king Vāsudeva was found. The site was abandoned after the Kuṣāṇa period.[185]

Inhabited continuously since PGW times Sonkh in Mathura district clearly declined in constructions after the Kuṣāṇas. The seven levels belonging to Kuṣāṇa times show a densely built up area of houses.[186] Besides residential houses with bathrooms, the street is lined with shops.[187] The existence of shops is significant, because few shops appear in excavation reports. Coins of the Kuṣāṇa kings,[188] bronze objects,[189] votive tanks[190] and terracotta figurines of different divinities occur.[191] We also find a brahmanical brick temple[192] in this period. The Gupta and the post-Gupta periods show two levels[193] each. But in contrast to Kuṣāṇa and pre-Kuṣāṇa periods, their wall remains are scanty.[194]

An earlier excavation at Mathura in 1954-55 shows temporary desertion of the site after the NBP phase, which had structures. The next phase contains beads of different types of precious stones and copper coins including those of the Kuṣāṇas. It was followed by levels containing several terracotta figurines identical with those found at Ahicchatrā in levels datable to AD 100-300.[195] Gupta terracottas are found in the last period,[196] which is devoid of structures. Stratigraphic evidence is corroborated epigraphically, for altogether sixty-eight Śaka and Kuṣāṇa inscriptions, mostly of the first two centuries of the Christian era, can be counted at Mathura;[197] in contrast Gupta inscriptions are very few.

Excavations for four seasons carried out in Mathura in 1970s[198] do not provide any striking evidence of urbanism either in Gupta times or its continuity in medieval times. Settlement started in the sixth century BC and

[181] Ibid., p. 74.
[182] *IAR, 1979-80*, p. 75; *1980-81*, p. 70.
[183] *IAR, 1979-80*, p. 75; *1980-81*, p. 70.
[184] *IAR, 1978-79*, p. 74; *1979-80*, p. 75.
[185] *IAR, 1978-79*, p. 74.
[186] Herbert Härtel, "Some Results of the Excavations at Sonkh", *German Scholars on India*, II, p. 75.
[187] Ibid., p. 76.
[188] Ibid., p. 85.
[189] Ibid., pp. 90-91.
[190] Ibid., p. 88.
[191] Ibid., p. 92.
[192] Ibid., p. 77.
[193] Ibid., p. 71.
[194] Ibid., p. 77.
[195] *IAR, 1954-55*, pp. 15-16.
[196] Ibid., p. 16.
[197] T.P. Verma, *The Palaeography of Brahmi Script in North India*, pp. 107-8, 134-37.
[198] *IAR, 1973-74*, pp. 31-32; *1974-75*, pp. 48-50; *1975-76*, pp. 53-55; *1976-77*, pp. 54-56.

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became substantial by *c.* 300 BC. Coins, inscriptions and archaeological remains show that Mathura became an important centre in the first century AD. This is attested by brick structures, roofing tiles, fortifications, etc.[199] The period from the first to the third century AD shows sprinklers, incense-burners, basin bowls, stamped and painted pottery, an ivory comb, an inscribed potsherd, pieces of shell bangles, votive tanks, a terracotta rattle, and terracotta figurines and sealings as well as Kuṣāṇa copper coins.[200] In contrast, the period *c.* AD 400-500 has a few floors and brick walls.[201] It shows mud houses and brickbats.[202] The find of sealings, terracotta figurines and clay lamps does not remove the overall impression of decline.[203] The late Gupta phase shows Buddha heads fashioned in the Mathura tradition, sprinklers and some pottery.[204] No post-Gupta finds are reported, which suggests that after a spell of decay in Gupta times the settlement was almost deserted.

Located at the conjunction of important trade routes, Mathura was a thriving city under the Kuṣāṇas. It seems to have been the capital of their eastern empire. When trade declined and the Kuṣāṇa power disappeared, Mathura fell on bad days. Fa-hsien does not refer to the city of Mathura. He speaks of the country of Mathura which contained twenty monasteries with about three thousand monks.[205] Hsüan Tsang repeats the number of monasteries but reduces the number of the monks to two thousand. He however adds that the capital is twenty *li* or four miles round.[206] Obviously Mathura became only a place of religious importance by the seventh century (Fig. 5).

The NBP phase at Batesvara in Agra district seems to be more impressive than the succeeding phase belonging to first to sixth century AD. The latter phase seems to have material belonging to Kuṣāṇa and Gupta times. It has four successive mud floors laid on brick-jelly foundation as well as a wall of baked bricks.[207] Its finds include beads, bangles, discs, votive tanks and figurines, all made of terracotta. Stone beads and caskets, a scrolled zinc ear-stud, shell bangles, copper and iron objects were also found.[208] Some copper coins were recovered. The last period is called the Rajput-Sultanate period, which may have started around 1000. Its finds include skin rubbers and objects of glass and faience. Two floors and incomplete walls built of reused bricks were exposed.[209]

The medieval greatness of Kanauj in Farrukhabad district, for which several wars were fought between the Pālas, Pratīhāras and Rāṣṭrakūṭas, has still to be attested by the spade. Its earliest occupation clearly lasted

[199] *IAR, 1974-75*, p. 50; *1975-76*, p. 55. [200] *IAR, 1974-75*, p. 50. [201] Ibid.
[202] *IAR, 1976-77*, p. 55. [203] Ibid. [204] Ibid., p. 55.
[205] Legge, tr., *A Record of Buddhistic Kingdoms*, p. 42, fn. 3. [206] *Si-Yu-Ki*, I, p. 179.
[207] *IAR, 1975-76*, p. 43. [208] Ibid. [209] Ibid.

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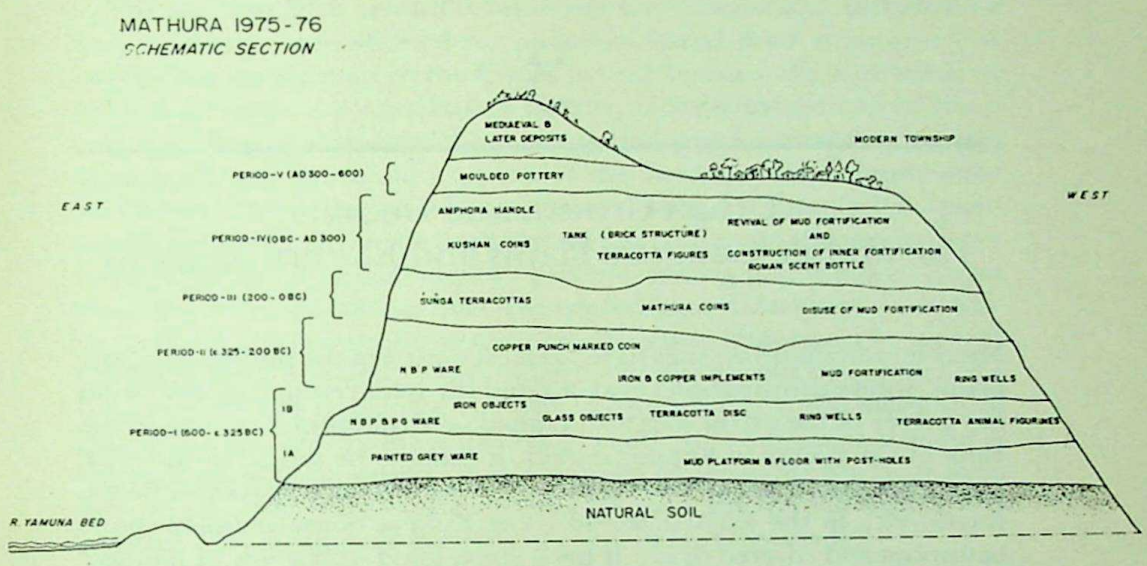


FIG. 5. Mathura 1975-76 schematic section after M.C. Joshi (unpublished).

from NBP times till the end of the Kuṣāṇa period. The period which succeeded the NBP phase in *c.* 200 BC had seven phases of structure in burnt bricks,[210] a feature which reminds us of Kuṣāṇa levels in Sonkh. From the earliest levels typical Kuṣāṇa pottery was unearthed.[211] After this period we find a gap in occupation,[212] and then the medieval period started. Kanauj was the capital of Harṣa, but its material remains are yet to be exposed.

If we leave out Taxila now located in Pakistan, it would appear that in Punjab, Haryana, Delhi and western Uttar Pradesh, urbanism had a shorter life. Elements of urban life appeared during the fifth and fourth centuries BC at several places and attained climax in the first three centuries of the Christian era. Generally the sites show either desertion after Kuṣāṇa times or a sharp decline in the Gupta period followed by a break in occupation. Only Ropar and Ahicchatrā do not indicate marked decline in Gupta layers. The settlements of Punjab and Haryana display very little of urbanism during the fourth-sixth centuries AD. At many sites in the two states the cultural deposits of the Kuṣāṇa epoch are followed by the substantial accumulation of the Sultanate period. Many sites lying east of the river Yamuna show a similar development.

[210] *IAR, 1955-56*, p. 19. [211] Ibid. [212] Ibid.

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3

Urban Growth and Decay: The Middle Gangetic Plains and Eastern Regions

Many important urban sites have been excavated in the middle Gangetic plains, where urbanization began around the sixth century BC. We begin our survey of the urban sites with Jajmau or Yayātipura. Located on the bank of the Ganga in Kanpur district, it came to be settled in the NBP phase, but baked bricks were used here widely in making rooms, floors, drains, etc., in the Kuṣāṇa period.[1] The Kuṣāṇa house-complex shows bathroom and covered drain. It has a street lined with a row of houses,[2] which reminds us of Sonkh in Mathura and Khairadih in Ballia. In addition to sprinklers, ivory objects, iron objects and votive tanks, copper coins are also found.[3] Several terracotta sealings, some of them inscribed, occur.[4] Undoubtedly the site was deserted after the Kuṣāṇa period, for its later levels belong to the late medieval period.[5] Period III of the site after Kuṣāṇa times was identical with the Muslim phase, in which we find glazed ware and thirty-six copper coins of Sikandar Lodi.[6]

Excavations for five seasons at Hulaskhera[7] in Lucknow district exposed Kuṣāṇa and Gupta structures. The Kuṣāṇa period shows three levels of baked-brick structures, although constructions in the last level show the use of brickbats.[8] However this level reveals a unique Kuṣāṇa road, which was rebuilt in post-Kuṣāṇa times with bricks and brickbats taken from older brickwork.[9] The Kuṣāṇa period road was traced up to a length of 200 metres. A well-planned drainage system belongs to the Kuṣāṇa complex, which is described in some detail.[10] Materials from the Kuṣāṇa period betoken an urban culture. They include various types of pottery in red ware. A Kārtikeya image in gold, silver punch-marked coins, and copper coins of three Kuṣāṇa kings occur. Beads, votive tank, skin rubber, potters' stamp, human and animal figurines, all made of terracotta, also appear.[11]

[1] *IAR, 1975-76*, p. 52. [2] Ibid., p. 48. [3] *IAR, 1975-76*, p. 52; *1976-77*, p. 54.
[4] *IAR, 1975-76*, p. 53; *1976-77*, p. 54. [5] *IAR, 1974-75*, p. 48.
[6] *IAR, 1976-77*, p. 54.
[7] This spelling occurs in *IAR, 1983-84*, p. 88; in the earlier issues the place is spelt as Hulas Khera.
[8] *IAR, 1978-79*, p. 74; cf., *1983-84*, p. 88. [9] *IAR, 1979-80*, p. 77.
[10] *IAR, 1983-84*, p. 88. [11] *IAR, 1978-79*, p. 74; *1983-84*, p. 88.

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The third to fifth centuries represent late Kuṣāṇa and early/middle Gupta periods, and show three phases of baked brick structures.[12] A citadel was constructed in the Gupta period, but its walls were made of brickbats.[13] Red ware was the main pottery, and spouted sprinklers, lids of inkpots, and lipped bowls of the earlier period were found in the citadel.[14] It yielded copper and silver coins of the Kuṣāṇas and Guptas, some sculptures, and a few seals inscribed in Gupta character.[15] The post-Kuṣāṇa phase (i.e. from the third to the fifth century AD) also yielded ivory combs.[16] Ivory and glass bangles[17] probably belong to this phase. Gupta sealings and terracottas have been recovered from Hulaskhera.[18] An oval-shaped iron object comprising seventeen bars is an important discovery.[19] On the whole Hulaskhera shows urban continuity till the fifth century. We find a brick-built residential complex surrounded by a one metre thick boundary wall. Rebuilding activity is also noticed.[20] But Gupta structures betray signs of deterioration in the building material, for brickbats were used to construct walls of the citadel. Obviously the site was abandoned after the fifth century, even before the end of the Gupta rule.

The cultural complex at Manwan in Sitapur district shows a little variation from the general pattern of occupational decline after Kuṣāṇa times. The site remained occupied from *c.* 500 BC to medieval times. The NBP period with two brick structures and associated pottery was succeeded by the Śuṅga-Kuṣāṇa period marked by the appearance of sprinklers, and terracotta sealings bearing Brāhmī legends. The Gupta levels contained terracotta figurines. We are told that the site was reoccupied in early medieval times, which contained typical Muslim pottery.[21] This suggests that the site remained uninhabited for about six centuries after the Gupta period.

At Śrāvastī on the borders of Gonda and Bahraich districts occupation ended towards the beginning of the Christian era when the city lost its metropolitan character.[22] Two inscriptions of Kaniṣka I have been found at Set-Mahet. Together with the excavated material they suggest that the town was in a flourishing state in the first century AD.[23] The limited, vertical excavation carried out at Śrāvastī covered only a small part of the ancient city, which had a circuit of 17,250 feet and enclosed an area of 40,743 acres.[24] But in the fifth century Fa-hsien found it in a bad shape.[25] He states: "There are very few inhabitants in this city, altogether perhaps

[12] *IAR, 1978-79*, p. 75. [13] *IAR, 1981-82*, p. 72. [14] Ibid. [15] Ibid.
[16] *IAR, 1978-79*, p. 75. [17] *IAR, 1980-81*, p. 71. [18] *IAR, 1983-84*, pp. 88-89.
[19] *IAR, 1978-79*, p. 75. [20] *IAR, 1980-81*, p. 71. [21] *IAR, 1969-70*, p. 44.
[22] K.K. Sinha, *Excavations at Śrāvastī*, p. 11. [23] Ibid., p. vi.
[24] *ASR, 1907-8*, p. 84.
[25] J. Legge, *Fa-Hien's Record of Buddhist Kingdoms*, p. 55f.

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500 families".[26] In the seventh century Hsüan Tsang found the chief town of the kingdom of Śrāvastī ruined and deserted. Mostly in ruins, it had a few inhabitants.[27] (Fig. 6).

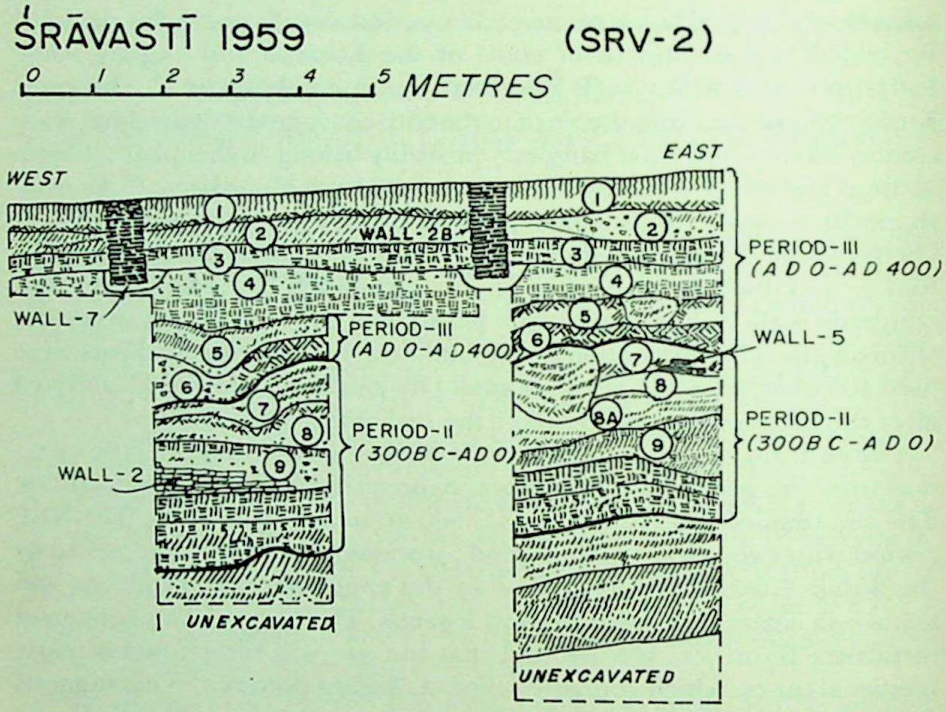


FIG. 6. Śrāvastī, 1959 (SRV-2) after K.K. Sinha, *Excavations at Śrāvastī, 1959*, Varanasi, 1967, fig. 3.

Several constructions belong to Gupta and post-Gupta times.[28] But most probably they were for religious use. The most important was the Jetavana-*mahāvihāra* or Buddhist monastery[29] built around AD 1000 or earlier. In AD 1130 it was granted six villages for the maintenance of the monks.[30]

Although Sringaverapur, situated thirty-five km upstream of Allahabad on the Ganga, was excavated for five seasons,[31] the exposure of a 'unique' brick-built tank, possibly constructed in the first century AD, received the main attention. The habitational area is treated perfunctorily in the

[26] *Si-Yu-Ki*, p. xliv. [27] *Si-Yu-Ki*, II, pp. 1-2. [28] *ASR, 1907-8*, pp. 94-95.
[29] Ibid., p. 39. [30] Ibid.
[31] *IAR, 1977-78*, pp. 54-56; *1978-79*, pp. 57-59; *1979-80*, p. 74; *1980-81*, pp. 67-68; *1981-82*, pp. 66-67.

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reports. A large number of baked brick structures is assigned to the Maurya, Śuṅga, Kuṣāṇa, Gupta, 'Rajput' and 'medieval times',[32] but neither the relative magnitude of the structures belonging to the six periods nor the time bracket of 'Rajput' and 'medieval times' is indicated. One structural complex, comprising several rooms, successive brick floorings, a drain and a soak-pit, is specifically mentioned[33] but not assigned to any particular period. It may have spanned several periods beginning with the NBP phase and ending with the Guptas. But in another context reference is made to the baked brick structures of Kuṣāṇa times.[34] A visit to the site also creates the impression that the Kuṣāṇa structures were far more impressive.[35] Antiquities suggest that the tank was in use in the beginning of the Christian era,[36] and a little away from the tank-complex a large house-complex was found.[37] Sophisticated terracotta female figurines are attributed stylistically to the Śuṅga-Kuṣāṇa period.[38] An inscribed terracotta seal of the third century also occurs.[39] Kauśāmbī coins, Ayodhya coins, and coins of Vima Kadphises[40] leave little doubt that the place had a strong urban orientation in post-Maurya times.

The desertion of the tank, probably in the second century, was followed by eight structural phases.[41] Three are assigned to late Kuṣāṇa and Gupta periods, and the remainder to 'early and late medieval periods'.[42] To the earlier three structural phases belong a prominent residential complex comprising entrances, rooms, a corridor and a *chulha* of bricks. The complex belonged to the late Kuṣāṇa period, as can be inferred from a gold coin. The layers contemporaneous with the house-complex and the underlying layers yielded seals and sealings of about the third century AD.[43] The Gupta period, in spite of some pieces of sculptures, was poor. We are told of a widespread disturbance in the site in this period.[44] Generally brickbats drawn from the earlier remains were utilized in Gupta and subsequent structures,[45] which suggests deterioration. A terracotta sealing of the Gupta period appears.[46] A stone plaque showing Mahiṣāsuramardinī may belong to the eighth century AD.[47] The 'early medieval' of the excavator possibly refers to the eleventh and twelfth centuries as revealed by the finds and 'late medieval' to post-twelfth centuries. The eighty silver coins of the Gāhaḍavāla king Govindacandra[48] probably

[32] *IAR, 1978-79*, p. 59. [33] Ibid. [34] *IAR, 1977-78*, p. 55; cf. *1981-82*, p. 66.
[35] I gathered this impression in the middle stages of the excavation.
[36] *IAR, 1979-80*, p. 74; *1982-83*, p. 91. [37] *IAR, 1982-83*, p. 91.
[38] *IAR, 1981-82*, p. 67. [39] Ibid. [40] *IAR, 1977-78*, p. 56.
[41] *IAR, 1981-82*, p. 66. [42] Ibid. [43] *IAR, 1982-83*, p. 92; *1983-84*, p. 85.
[44] *IAR, 1977-78*, p. 55. [45] *IAR, 1981-82*, p. 66. [46] *IAR, 1983-84*, p. 85.
[47] Ibid., p. 67.
[48] Ibid., cf. *IAR, 1977-78*, p. 56.

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belong to 'early medieval' or 'Rajput' times. Of course the remains belonging to 'late medieval', apparently 'Muslim' times, are impressive.[49]

The relative stratigraphic position of the pre-Gupta and Gupta occupations at Bhita near Allahabad may be inferred from the excavation carried out in 1911-12 by John Marshall. Marshall identifies constructions of the Maurya period and of the first century BC and first century AD.[50] He particularly mentions The House of the Guild *(sahajitiye nigamasa)*, which was set up in the third century BC and had vanished by the end of the third century AD.[51] Several shops and houses set up in Śuṅga times were deserted or destroyed in the early Gupta period or even in Kuṣāṇa times.[52] The destruction is attributed to some tribal attack on the city in the early Gupta period.[53] However some houses were rebuilt, and shops appeared along the street in the Gupta period.[54] Coins recovered from Bhita mostly belong to *c.* 200 BC-*c.* AD 200.[55] Marshall found the remains of the Gupta structures so poor and mutilated that their plan could not be restored.[56] The small bricks or brickbats used in reconstruction are considered characteristic of the Gupta period.[57] Although copper coins of the Kuṣāṇa rulers and their several contemporaries have been found at Bhita,[58] no Gupta coins have been reported from this place. However coins of the Sultanate period are found.[59] But Gupta seals, sealings[60] and terracottas predominate. Thirteen seal moulds or matrices including five of ivory have been found.[61] Many seals belong to artisans and merchants, and can be compared with those recovered from Vaishali. Pottery ranges from Maurya to Gupta and comes up to medieval times. A few seals[62] and an iron elephant goad[63] belong to post-Gupta times. A building erected in the eighth century or even later contains some finely carved bricks from some early Gupta structures built, here and there, into the walls.[64] This could be a religious structure. Apart from the practical absence of Gupta coins, no coins are found till we come to the Sultanate period. Similarly shops, and seals of artisans and merchants, disappear. The contrast between Gupta and post-Gupta remains is clear enough to demonstrate that the urban life of Bhita came to an end after the Gupta period.

Excavations have been carried out in a large area at Kauśāmbī. Located nearly sixty km to the south-west of Allahabad, where the countrywide conquests of Samudra Gupta are inscribed on an Aśokan pillar, this place is richer in relics belonging to Kuṣāṇa times than those belonging to the

[49] Based on personal observation. [50] *ASR, 1911-12*, p. 30. [51] Ibid., pp. 30-31.
[52] Ibid., pp. 34-38. [53] Ibid., p. 34. [54] Ibid., p. 38. [55] Ibid., pp. 62-71.
[56] Ibid. [57] Ibid. [58] Ibid., p. 30. [59] Ibid., pp. 62-71.
[60] Ibid., p. 46. [61] *ASR, 1911-12*, p. 45.
[62] Ibid., p. 59; only two post-Gupta seals have been illustrated by John Marshall.
[63] Ibid., pp. 91-92. [64] Ibid., p. 43.

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Gupta age.[65] Three Kuṣāṇa inscriptions belong to Kosam, and one mentions the Ghoṣitārāma monastery at Kauśāmbī which settles the identification of the site. Several other epigraphs[66] also show that it was in a better shape in that age. A large number of the coins of the Maghas, who ruled the neighbouring areas with Kauśāmbī as their capital, belongs to the second and early third centuries AD, and speaks of artisanal and trading activities. The settlement seems to have fallen on bad days after the Gupta period as shown by the nature of deposit (Fig. 7).

Fa-hsien most probably saw the Ghoṣitārāma monastery which he calls the Ghosira-vana-vihāra. He found this monastery in ruins.[67] He noticed congregations belonging to the little vehicle.[68] Hsüan Tsang does not clearly refer to this phenomenon. But he states all the ten monasteries *(saṅghārāma)* were in ruins and deserted.[69] This would imply that because of lack of urban support they died out. He however adds that there are fifty brahmanical temples, and numerous heretics.[70] Although he notes the existence of a *vihāra* or monastery in the city, he refers to several old constructions and to the ruins of an old habitation.[71] The general impression created by Hsüan Tsang's account is that of a declining city.

A minor excavation at Ayodhya in 1969-70 showed that the site was occupied in NBP times. The upper levels of the NBP phase brought to light six terracotta human figurines grey in colour, and two Ayodhya coins. It also yielded some iron objects.[72] Although there was a massive brick structure built in several phases at Kubera-Tila.[73] It has not been dated; perhaps it belonged to the Kuṣāṇa period.

Excavation at Ayodhya in 1979-80 shows evidence of town planning in the late NBP phase when we find terracotta ring wells[74] and structures of baked bricks. After the end of this phase we get a baked brick wall of the Śuṅga period and a part of the house-complex of Gupta times. The 'typical' Gupta pottery is also found.[75] It is stated that "occupation continued through the Śuṅga, Kuṣāṇa and Gupta periods to medieval times",[76] but the elements that continued after the Gupta period are not mentioned. In post-Gupta days the site was evidently neglected.

Rajghat in Varanasi deserves more attention because of extensive excavations carried out at this site in 1957-58 and in 1960-65. In 1961-62 it was horizontally excavated. The total area covered by all the trenches including

[65] *IAR, 1953-54*, p. 9.
[66] T.P. Verma, *The Palaeography of Brahmi Script in North India*, pp. 136-37.
[67] *Si-Yu-Ki*, p. lxviii.
[68] Ibid.
[69] *Si-Yu-Ki*, I, p. 235.
[70] Ibid., pp. 235-36.
[71] Ibid., pp. 224-29.
[72] *IAR, 1969-70*, p. 41.
[73] Ibid.
[74] *IAR, 1979-80*, p. 77.
[75] Ibid.

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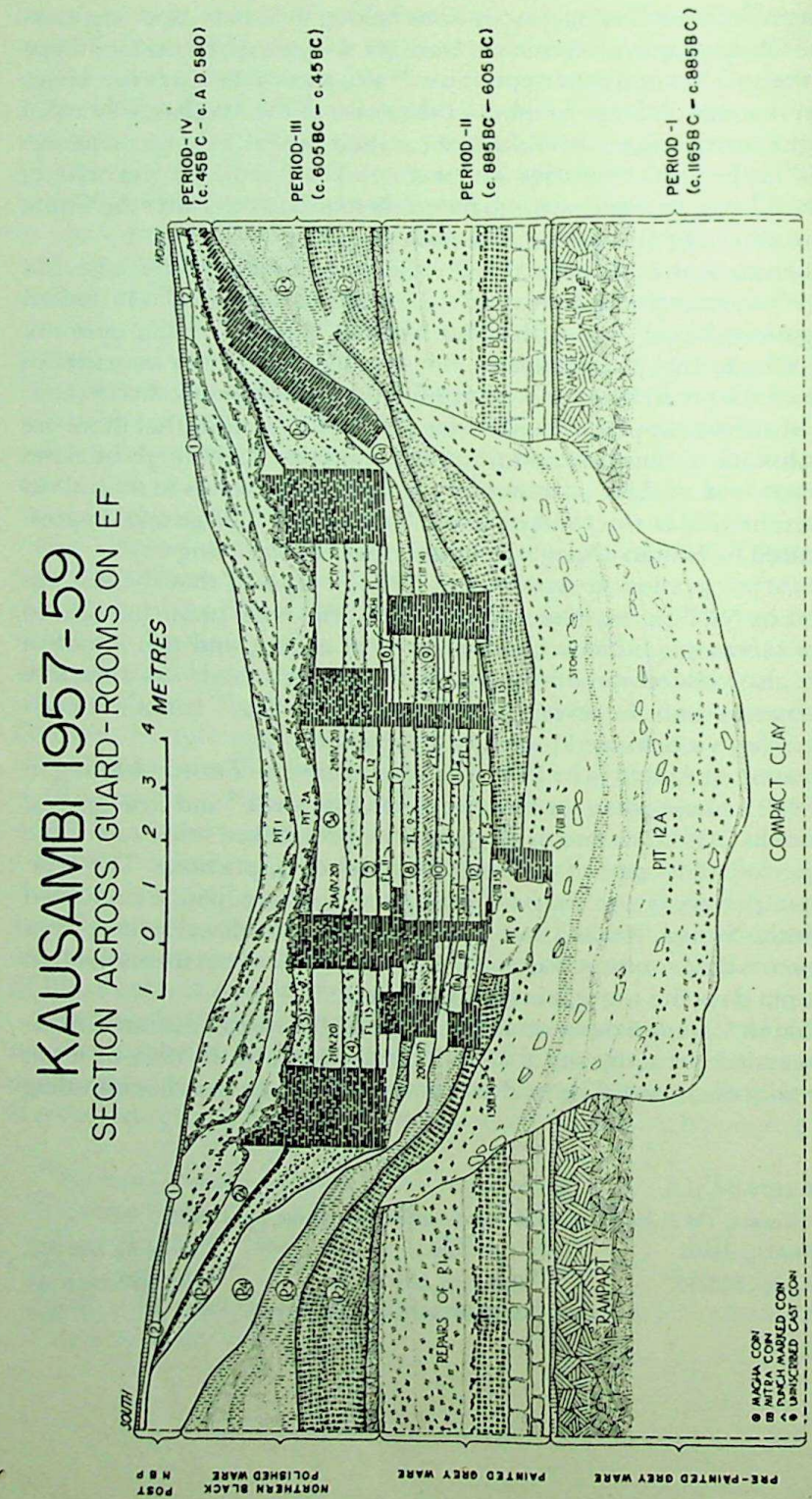


FIG. 7. Kauśāmbi 1957-59 section across guard-rooms on E 7 in G.R. Sharma, *Excavations at Kauśāmbi*, Allahabad, 1960, fig. 4.

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trial and regular, and also by the soundings, comes to 22529.20 sq.m,[77] which will work out at nearly 3.5 sq.km.

At Rajghat the maximum structural activity is noticeable in the NBP and Kuṣāṇa phases.[78] A comparative study of the excavations conducted in 1940, 1957-58, 1960-65 and 1977-78 shows that with impressive structures in three phases the period AD 0-300 was "probably the most prosperous period in the history of this site."[79] A flourishing urban centre, Varanasi was much more densely populated now than during any of the preceding periods.[80] Houses roofed by tiles were built according to a plan, and so was the case with the layout of the entire town complex comprising roads and lanes.[81] The elaborate civic device providing for public and private drains appears to be most striking.[82] However dwellings of the affluent can be demarcated from those of the other inhabitants who lived in poorly built houses.[83] Archaeology shows not only 'sudden increase in the luxury goods' but also 'an unprecedented growth' in crafts, and industries.[84] Varied and numerous objects of iron and copper, iron slags as well as three large-sized furnaces, probably used for iron smelting, have been found.[85] Beads were made of stone and glass, of which bangles were manufactured.[86]

Ivory manufacture was an important craft, and the advanced state of textile industry,[87] for which Varanasi is famous in Pali texts, is attested archaeologically.[88] Crafts and industries contributed substantially to its urban economy.[89] Many artisanal products including beads of semiprecious stone and probably artefacts of iron were exported to the different parts of the country. The finds of red polished ware, rouletted ware, similarities in stone beads, and depiction of Graeco-Roman deities on the sealings suggest wide commercial contacts not only with eastern and western India but also with Central Asia and the Graeco-Roman world,[90] whose influence was felt considerably at Taxila.[91] A few coins, belonging

[77] This calculation has been made on the basis of the sizes of twelve trenches, two trial trenches and three soundings given in A.K. Narain and T.N. Roy, *Excavations at Rajghat*, I, pp. 37-74.

[78] *IAR, 1965-66*, p. 55.

[79] B.P. Singh, *Life in Ancient Varanasi: An Account Based on Archaeological Evidence*, p. 5. Also see Krishna Deva, "Excavations at Rajghat Near Benares", *Annual Bibliography of Indian History and Indology*, III (1940), pp. 41-51. For report on the excavation of an extensive area see A.K. Narain and T.N. Roy, *Excavations at Rajghat*, I, 1976, II, 1977. The 1977-78 excavation carried out by B.P. Singh under the supervision of K.K. Sinha was on a small scale. Its main results are incorporated in B.P. Singh, *Life in Ancient Varanasi*.

[80] B.P. Singh, op.cit., p. 62. [81] Ibid., pp. 74, 262. [82] Ibid.

[83] Ibid., pp. 41-45. [84] Ibid., pp. 260-61. [85] Ibid.

[86] Ibid., pp. 223-32, 261. [87] Ibid., p. 224. [88] Ibid. [89] Ibid., p. 261.

[90] Ibid. [91] Ibid., pp. 245-48, 261.

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to the first three centuries of the Christian era, have been found, but they include those of Ayodhya and Kauśāmbī; these coins suggest regional exchange. More importantly the city of Varanasi issued its own coins,[92] which show its importance in trade and commerce. Further, the discovery of nearly four hundred seals and sealings, mostly belonging to the first three Christian centuries, is significant in the context of trade and commerce.

The period AD 0-300 is called the most prosperous at Rajghat.[93] The succeeding period AD 300-700 is considered equally prosperous,[94] on the ground that it had an underground structure which was probably used for storing foodgrains[95] and that its art was more sophisticated.[96] The continuity of urban life in Varanasi in this period is attested by structures, pottery, beautiful terracottas and the use of glass, stone beads and ivory.[97] However to attribute the beginnings of the shell industry to this period[98] is wrong. The largest number of shell bangles belonged to the late phase of Period III,[99] i.e. to the third century AD or a little earlier. Most shell beads belong to this period.[100] Evidently urbanism lost its vigour in Gupta times. If the underground structure is taken out of consideration, we find less of structures during the fourth to seventh centuries.[101] In any case the function of the underground brick building is not clear, and it may indicate conditions of insecurity.

The dearth of finds suggests less of trade contact after the third century. Perhaps it indicates a decline in long-distance trade, "although it could not have been considerable."[102] The paucity of the various types of objects is attributed to a shorter time of the Period IV (AD 300-700),[103] but according to the excavators this period covered four hundred years in comparison with the earlier period (III) which covered only three hundred years. The comparative paucity of pottery[104] including the decorated pieces[105] and also of stone beads,[106] which were manufactured at Varanasi earlier, is clear. The shortage of pottery and decrease in structures is explained by the digging of smaller area belonging to the third-seventh centuries.[107] However the trenches that were laid out in 1957-58 and later in 1960-65

[92] Ibid., pp. 239-41.
[93] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, I, p. 28; B.P. Singh, op.cit., p. 5.
[94] B.P. Singh, op.cit., pp. 74, 249, fn. 1, p. 263. [95] Ibid., pp. 63-70, 264-65.
[96] Ibid., p. 265. [97] Ibid., pp. 264-65. [98] Ibid., p. 265. [99] Ibid., p. 143.
[100] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, III, p. 46.
[101] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, I, p. 31.
[102] B.P. Singh, op.cit., p. 248. [103] Ibid., p. 249.
[104] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, II, p. 63. [105] Ibid., p. 100.
[106] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, III, p. 21.
[107] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, II, p. 63; B.P. Singh, op.cit., p. 54.

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do not show the excavated area covered by the third-seventh centuries to be considerably smaller than that covered by the first-third centuries. Out of fourteen trenches including two trial trenches, the 'Gupta' or Period IV appeared in twelve and the pre-Gupta or Period III in eleven trenches. The measurements of the trenches given in the report[108] leave little doubt that a sufficiently large area assignable to the fourth-seventh centuries was exposed. Hence it is difficult to accept the view that a smaller area relating to these centuries was excavated.[109] None the less Gupta and post-Gupta terracotta plaques are fairly large and they also show artistic skill.[110] Many of these were used for religious purposes and could hardly be objects of trade. The fact that Varanasi was an important centre of administration in Gupta days can be inferred from many seals, particularly from the one that calls it an *adhiṣṭhāna* or a city equipped with its own *adhikaraṇa* or administrative office.[111] But whatever be the achievements of Varanasi in art, religion administration and other fields in Gupta times, its archaeological record shows that it enjoyed the highest degree of urbanism in pre-Gupta days. The material culture of later times does not compare favourably with that of earlier times. (Fig. 8).

Archaeologically the period covering *c.* AD 700-1200 at Rajghat shows clear symptoms of urban decay.[112] Its structures had little to boast of,[113] probably because of extensive pits dug towards the end of the occupation.[114] The find of many pieces of sculpture and of architectural fragments suggests the existence of some Hindu construction.[115] Obviously since Gupta times the site gradually acquired more and more of a religious character. Lack of structures is matched by the paucity of pottery. "This period yielded the minimum number of sherds" as in most trenches the layers assigned to it were disturbed by huge pits.[116] We find a limited number of sherds of red ware.[117] The majority of sherds did not possess any slip or wash.[118] Beads of glass, semiprecious stone and terracotta continued in much reduced numbers.[119] The period-wise distribution of beads is given as 603 for Period III (pre-Gupta), 496 for Period IV (Gupta) and 305 for Period V (post-Gupta). The terracotta art seems to have

[108] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, I, pp. 19-20, 37-65.

[109] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, II, p. 63; B.P. Singh, op.cit., p. 54.

[110] This can be said on the basis of A.K. Narain and T.N. Roy, *Excavations at Rajghat*, IV which illustrates these plaques.

[111] A sealing in Gupta character carries the legend *Vārāṇasyādhiṣṭhānādhikaraṇasya*, A.K. Narain and T.N. Roy, *Excavations at Rajghat*, III, p. 3.

[112] This can be inferred from A.K. Narain and T.N. Roy, *Excavations at Rajghat*, II, pp. 16-17.

[113] Ibid., p. 16. [114] Ibid. [115] Ibid. [116] Ibid., p. 70.

[117] Ibid., p. 16. [118] Ibid.

[119] A.K. Narain and T.N. Roy, *Excavations at Rajghat*, III, p. 21.

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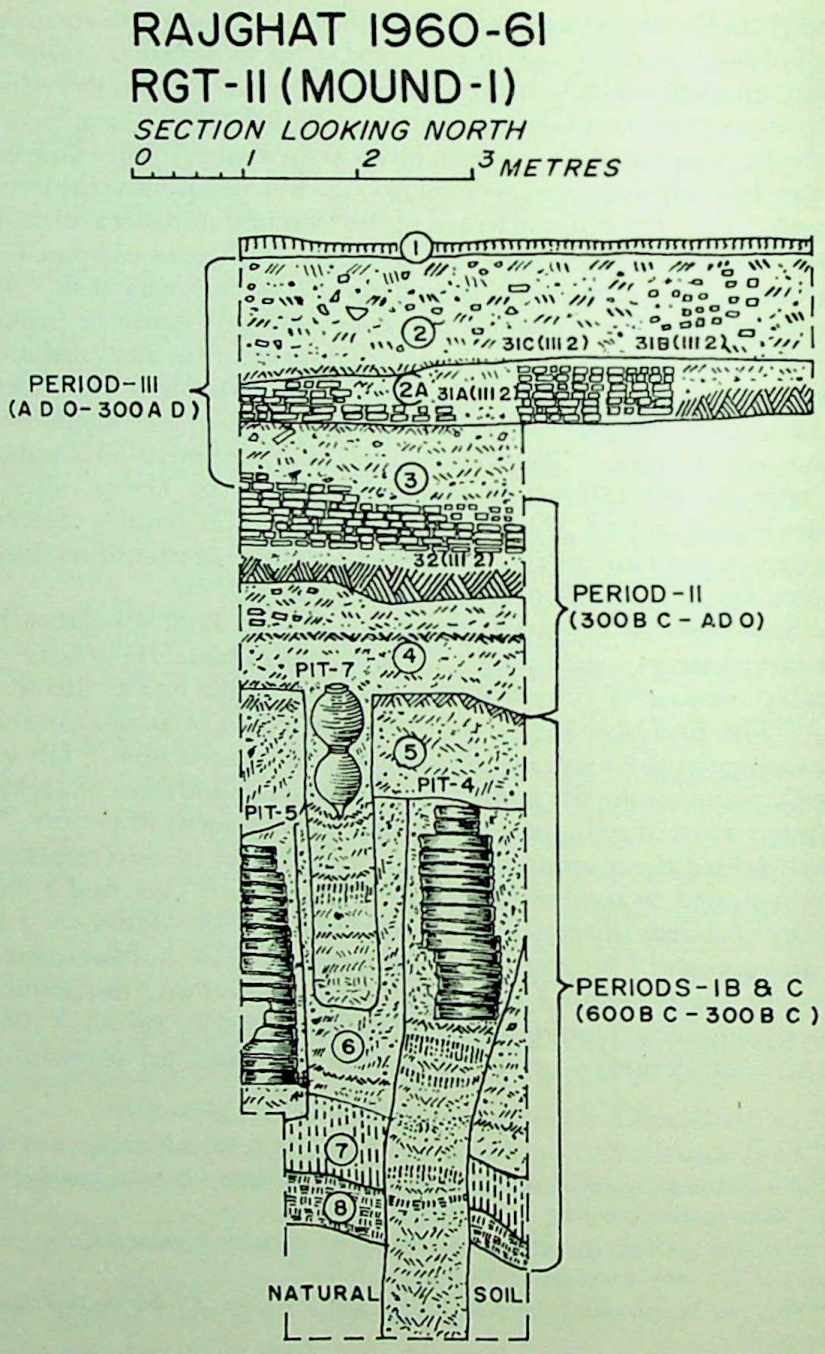


FIG. 8. Rajghat 1960-61 RGT-11 (Mound-1) section looking north after A.K. Narain and T.N. Roy, *Excavations at Rajghat (1957-1958; 1960-1965)*, pt I, Varanasi, 1976, pp. 22-32, 39-40, fig. 4.

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declined in both popularity and artistic merit.[120] Very few of the moulded plaques that were discovered possessed any considerable artistic value.[121]

There is little doubt that few Gupta structures have been found at Rajghat.[122] But Sarnath had many Buddhist structures in early medieval times. Fa-hsien seems to have visited it. The Deer Park, according to him, had two *saṃghārāmas* with priests dwelling in them.[123]

In the seventh century Varanasi seems to have been a religious centre. Speaking of the capital of the Varanasi country, Hsüan Tsang states that the families are very rich, and the dwellings contain objects of rare value.[124] He speaks of twenty Deva temples in the capital and refers to the statue of Maheśvara.[125] Probably speaking of the country he says that it has thirty *saṃghārāmas* and a hundred or so Deva temples.[126]

Mason, in the district of Gazipur, at a distance of about thirty-six km east from Varanasi and not far away from the Ganga, shows decline in Gupta times. The period AD 100-200 yielded Kuṣāṇa copper coins, red ware and structures of baked bricks showing three rooms along with a brick flooring and a drain.[127] This period showed two structural phases.[128] It also yielded several inscribed seals and sealings as well as terracottas.[129] The next period AD 200-600 shows badly damaged structures,[130] although it has a few clay seals inscribed in Gupta character and some terracotta figurines of the Gupta style.[131]

In the NBP phase Sohgaura in Gorakhpur district was well settled. Brick construction, beads of semiprecious stones, punch-marked and cast coins, iron and copper objects together with mostly inscribed terracotta sealings[132] attest its urban nature. Many of the finds continued in post-NBP times with the addition of human and animal figurines of terracotta and some coins of post-Maurya times.[133] The find of Kuṣāṇa coins suggests that habitation continued up to the third century AD or so. After a gap in the occupation the 'medieval period' began,[134] presumably in the thirteenth century.

In addition to the stupa and the monastery, Piprahwa in Basti district has a house with sixteen rooms built in three phases. A long drain also occurs. The sixteen-roomed house was meant for residence, and its first

[120] Ibid., p. 17. [121] Ibid.

[122] I also gathered this information from my visit to the site.

[123] *Si-Yu-Ki*, pp. lxvii-lxviii. [124] *Si-Yu-Ki*, II, p. 44. [125] Ibid., p. 45.

[126] Ibid., p. 44. [127] *IAR, 1964-65*, p. 43.

[128] Ibid., p. 43. From local inquiry I understand that the correct name is not Masaon, as mentioned in *IAR, 1964-65*, p. 42, but *Mason*, meaning deserted. The mounds are spread over a large area and suggest the situation of a town not far from the bank of the Ganga.

[129] *IAR, 1965-66*, p. 93. [130] Ibid., p. 94. [131] *IAR, 1974-75*, p. 47.

[133] Ibid., p. 47. [134] Ibid.

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phase yielded more than twenty inscribed clay sealings in the Brāhmī script of the first century BC.[135] Thirty-one inscribed sealings were discovered in the excavation of 1972-73, and one of these mentioned Kapilavastu.[136] The associate finds included copper dishes (*thālī*) and bowls, iron pan and sockets, carnelian beads and a terracotta mask. Kuṣāṇa and Ayodhya copper coins as well as punch-marked coins in silver and copper were found.[137] There is no reference to any Gupta remains. Piprahwa is considered to be identical with Kapilavastu. Fa-hsien states that in this city there is neither king nor people; it is like a great desert. He however refers to a 'congregation of priests and about ten families' living there.[138] Hsüan Tsang states that the capital of Kapilavastu is overthrown and lies in ruins.[139] He adds that peopled villages are few and waste.[140] Moreover, according to him there are some ten desert cities in the country, wholly desolate and waste.[141]

Similarly the excavation at the mound of Ganwaria, adjacent to Piprahwa, did not yield any Gupta remains. Starting around 800 BC, occupation became impressive only in Śuṅga and Kuṣāṇa times when a larger structural complex came up.[142] The habitation area covered 300 × 200 metres, although the real extent of the ancient site was much larger.[143] We come across rooms, verandas, two courtyards with floors paved with bricks or brickbats.[144] There is also a covered drain of baked bricks.[145] The associate finds are listed in the report[146] indiscriminately, without any reference to the period. But beads of glass and semiprecious stones,[147] terracotta stamps, dabbers, beads, bangles, wheel and gamesmen, and glass bangles[148] seem to belong to post-Maurya times. Ganwaria is noted for the find of many coins. Apart from a hoard of sixty-four punch-marked silver coins, it has also yielded Ayodhya, Pañcāla and Kuṣāṇa copper coins, nearly a hundred in all. However Kuṣāṇa coppers form the main lot.[149] All these may be taken as material signs of urban life. In the final stage of construction houses of small brickbats appeared.[150] The excavator assigns two hundred years to Śuṅga and four hundred years to Kuṣāṇa times, and shows that habitation ceased by the end of the fourth century AD.[151] An

[135] *IAR, 1970-71*, p. 31; *1973-74*, pp. 27-28.
[136] *IAR, 1972-73*, p. 33.
[137] *IAR, 1973-74*, p. 28.
[138] *Si-Yu-Ki*, p. xliv.
[139] *Si-Yu-Ki*, II, pp. 13-14.
[140] Ibid., p. 14.
[141] Ibid., pp. 13-14.
[142] *IAR, 1975-76*, pp. 47-50.
[143] K.M. Srivastava, *Discovery of Kapilavastu*, p. 61.
[144] *IAR, 1975-76*, p. 49.
[145] Ibid.
[146] *IAR, 1975-76*, p. 49; *1974-75*, p. 40.
[147] *IAR, 1974-75*, p. 40.
[148] *IAR, 1975-76*, p. 50.
[149] K.M. Srivastava, op.cit., p. 126.
[150] *IAR, 1975-76*, p. 49.
[151] Ibid., p. 50. Four hundred years cannot be given to the Kuṣāṇa period.

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Indo-Sassanian coin bearing the legend *śrī* in Nāgarī script is assigned to the late ninth century,[152] but may be of a much later date.

Kuśīnagara, at the time of the death of Gautama Buddha, is described as a townlet not worthy of being the death place of the Master.[153] Lying thirty-five miles east of Gorakhpur, it is identical with Kasia, where Buddhist buildings were erected in the Maurya period. The central sanctuary and numerous other monuments suffered constant decline and continued to be rebuilt until Gupta times. They do not appear to have met with a violent end, but gradually fell into ruins.[154] Consequently objects of value, which they may have contained, had been removed long before the site became buried and covered by forests.[155] The monasteries were probably located at the outskirts of Kuśīnagara town, which mainly sustained the renouncers. When the town declined and disappeared a similar fate overtook the Buddhist monuments and their inmates. Fa-hsien states that in this city "there are but few inhabitants, such families as there are (are) connected with the resident congregation of priests".[156] Hsüan Tsang found the city in ruins,[157] and 'its' towns and villages to be waste and desolate.[158] The term 'its' probably refers to urban and rural settlements in the region of Kuśīnagara.

Khairadih (Ballia district), where settlement started around *c.* 800 BC, enjoyed the peak of urbanism in the first three Christian centuries. Horizontal excavation revealed "fascinating data of an urban Kuṣāṇa settlement for the first time in this geographical region".[159] A road constructed in two phases was flanked on either side by a row of residential buildings.[160] A house on the east had six rooms, with its floor built of bricks and a drain attached to it.[161] Pavements were made of bricks and brickbats, and covered the plinth area of every room. Numerous tiles from the house show that they were used for roofing.[162] Adjacent to the complex a two-roomed house was exposed; one room was probably used for storage.[163] Two underground structures were also used for storage,[164] and one of them is assigned to the third-fourth century AD.[165] The pottery (red ware) of the period was decorated.[166] Two furnaces dug in the earth and twenty-five kg of slag were found in a room.[167] Iron artefacts were manufactured

[152] K.M. Srivastava, op.cit., p. 150.

[153] It was a "branch-township with wattle-and-daub houses in the midst of jungle". s.v. *Kusinārā*, G.P. Malalasekera, *Dictionary of Pāli Proper Names*, p. i.

[154] *ASR, 1904-5*, p. 45. [155] Ibid. [156] *Si-Yu-Ki*, p. lii. [157] Ibid., p. 26.

[158] Ibid., pp. 31-32. [159] *IAR, 1981-82*, p. 69.

[160] *IAR, 1982-83*, pp. 93-94; cf. *1983-84*, p. 87. [161] *IAR, 1981-82*, p. 69.

[162] Ibid. [163] Ibid. [164] *IAR, 1982-83*, pp. 93-94. [165] Ibid., p. 94.

[166] *IAR, 1981-82*, p. 69.

[167] Information from Professor K.K. Sinha on the basis of excavation in 1983-84; also see *IAR, 1983-84*, p. 86.

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at Khairadih where an iron axe and a chisel were recovered.[168] An ironsmith's workshop existed on the northern end of the township, and it is held that its northernmost part was reserved for workshops.[169]

The various small finds further speak of an urban environment. These include terracotta skin rubber, dabber, potter's stamp, wheel, stopper, rattles, wheeled toys representing bull and elephant with a hole through nostrils; beads of glass, terracotta and semiprecious stones; copper bangle, bracelet and ear ornament; iron nail, knife-blades, shovel, rod, lamp, ring and sickle.[170] We also find human and animal figurines of terracotta in typical Kuṣāṇa and Gupta styles.[171] One inscribed terracotta sealing belongs to the first century BC, and another to the second-third centuries AD.[172] An inscribed sealing of the third-fourth centuries AD is also found.[173] Several Kuṣāṇa coins have been found.[174] This urban phase probably continued up to the fourth century AD.[175] So far no specific Gupta finds have been reported from this site (Fig. 9).

Like Khairadih, which is not far away from the Saryu river, Manjhi and Chirand, located on the bank of this river in Saran district of Bihar, show urban decline after the third century and repeat the same culture sequence. Manjhi, nineteen km west of Chapra, is not mentioned in any early literary text, but its mound with a circuit of approximately fifteen hundred metres shows it to be an ancient town. A full-fledged iron-using culture appeared here with the NBP Age (600-50 BC) when we find a massive baked brick fortification, terracottas, and objects of bone, ivory and glass. We also find coins, moulds and inscribed sealings (terracotta) in the late levels of the period.[176] Urbanization started at this site around 300 BC.[177]

The next period (50 BC-AD 300) shows exclusive red ware industry distinguished by spouted basins and bottle-necked sprinklers. Baked brick structures comprising walls covered two phases. This period yielded the largest number of antiquities, terracotta and stone pestles. An inscribed terracotta sealing of the second/third century AD and an ivory scale were important finds.[178] These antiquities indicate the growth of urbanism at Manjhi. After the third century 'the city was deserted'. As the excavator T.N. Roy points out, the site was marked by the absence of occupation in the Gupta period, "so well known from historical records".[179] The site remained deserted for nearly eight centuries. In the medieval period a small group of people settled over the earlier ruins sporadically in a very

[168] *IAR, 1982-83*, p. 94. [169] *IAR, 1983-84*, p. 86. [170] *IAR, 1981-82*, p. 69.
[171] Ibid., pp. 69-70. [172] *IAR, 1980-81*, p. 69. [173] *IAR, 1981-82*, p. 70.
[174] *IAR, 1980-81*, p. 69. [175] *IAR, 1981-82*, p. 70.
[176] T.N. Roy, "First Season Report on the Excavations at Manjhi—1983-84", (unpublished); *IAR, 1983-84*, pp. 15-16.
[177] *IAR, 1983-84*, p. 16. [178] Ibid. [179] T.N. Roy, op. cit.

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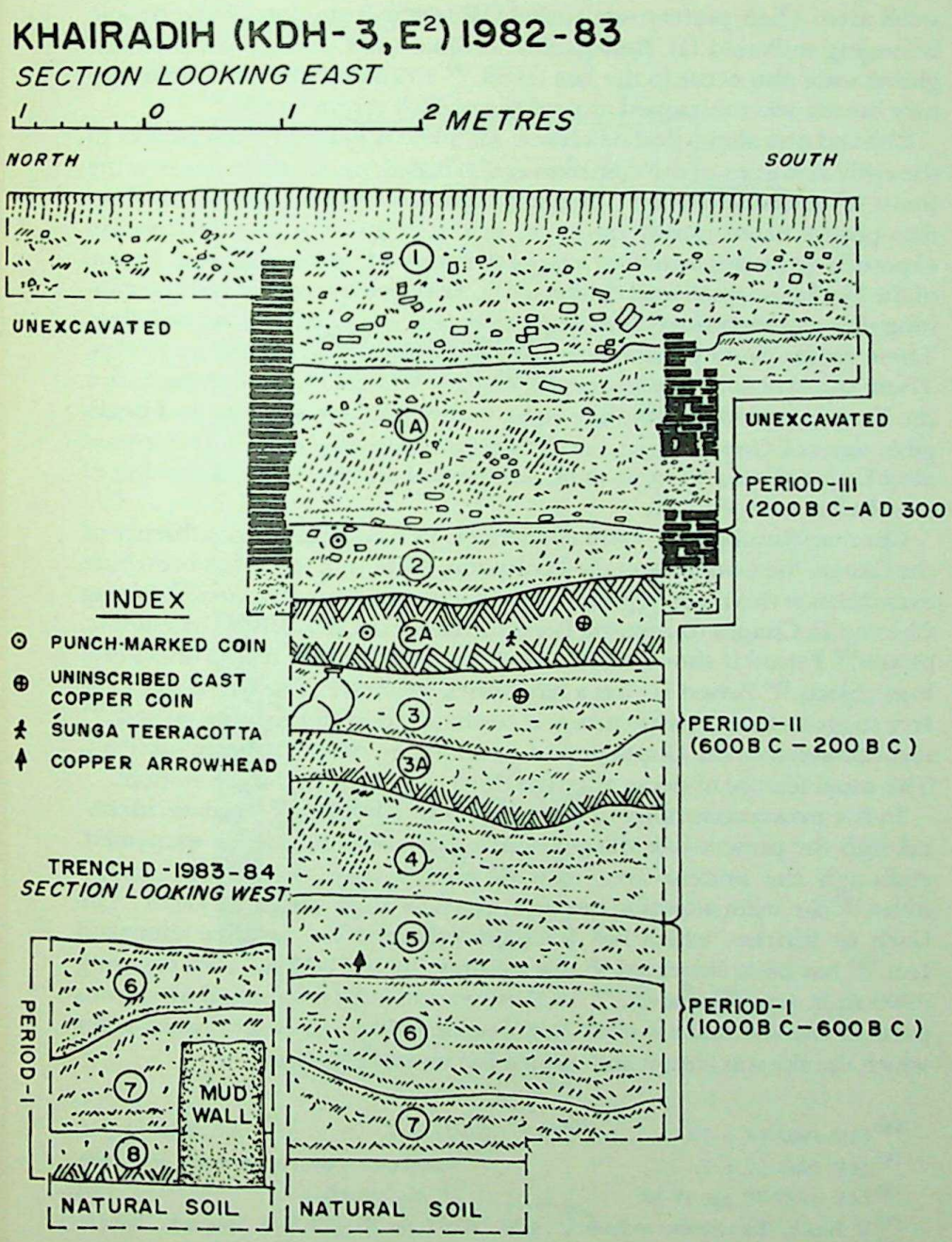


FIG. 9. Khairadih (KDH-3, E²) 1982-83 after K.K. Sinha (unpublished).

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small area. Their pottery was entirely different from that of the people belonging to Period III. Besides dull, ordinary red ware, a few pieces of glazed ware also occur in the late levels.[180] Evidently after the third century the site was reoccupied around the twelfth century or so.

Chirand also shows decline after *c.* AD 300. Its Period IV, ascribable to the early centuries of the Christian era, is called 'particularly noteworthy for its structural remains'.[181] The first excavation revealed three construction phases based mostly on burnt bricks.[182] But the later excavation exposed five phases including a large structure of residential type. In one of the blocks two small interconnected rooms were found with a drain running through their floors into a square cistern outside the main building. These rooms could possibly have served either as bathrooms or privies. These constructions typify a town. The site was almost abandoned after the Kuṣāṇa period,[183] although some cuttings have very poor and negligible signs of Gupta occupation.[184] By and large the place was deserted after Gupta times and came to be reinhabited only with the beginning of the Muslim rule (Fig. 10).

Chechar-Kutubpur in Vaishali district is located near the confluence of the Ganga, the Gandak and the Poonpoon. Although there has been little excavation at this place, it promises to be a site similar to the neighbouring Chirand in Chapra district. Its Period I covers the pre-NBP 'chalcolithic' phase.[185] Period II shows NBP ware. A huge pit yielded baked bricks and iron objects.[186] Period III has a large brick structure. The associated pottery suggests that the structure was constructed in the Kuṣāṇa period;[187] it continued into the Gupta period, to which no other finds are ascribed. The usual feature of decay after the third century seems to be evident.

In five excavations ranging from 1903-4 to 1958-62,[188] Vaishali, identical with the present-day village Basarh, has been extensively excavated. Although the ancient area extends over nearly twenty-four square miles,[189] the main attention has been given to 'Raja Vishal Ka Garh'. The Garh or fortress, which has a circumference of nearly five thousand feet,[190] has been subjected to several digs. In 1911-12 an area covering 9900 sq.ft. was excavated.[191] All these excavations conducted at various parts of the site make it clear that decline started in Gupta times, after which the site was almost abandoned for several centuries.

[180] *IAR, 1983-84*, p. 16. [181] *IAR, 1970-71*, p. 7. [182] *IAR, 1962-63*, p. 6.
[183] *IAR, 1964-65*, p. 7. [184] Based on my own observation of the site.
[185] *IAR, 1977-78*, pp. 17-18. [186] Ibid., p. 18. [187] Ibid.
[188] T. Bloch, "Excavations at Basarh", *ASR, 1903-4*, pp. 81-122; D.B. Spooner, "Excavations at Basarh, 1911-12", *ASR, 1913-14*, pp. 98-185; Krishnadeva and Vijaykanta Misra, *Excavation at Vaiśālī: 1950;* B.P. Sinha and Sitaram Roy, *Excavation at Vaiśālī 1958-62.*
[189] *ASR, 1903-4*, p. 81. [190] Ibid., p. 83. [191] *ASR, 1911-12*, p. 102.

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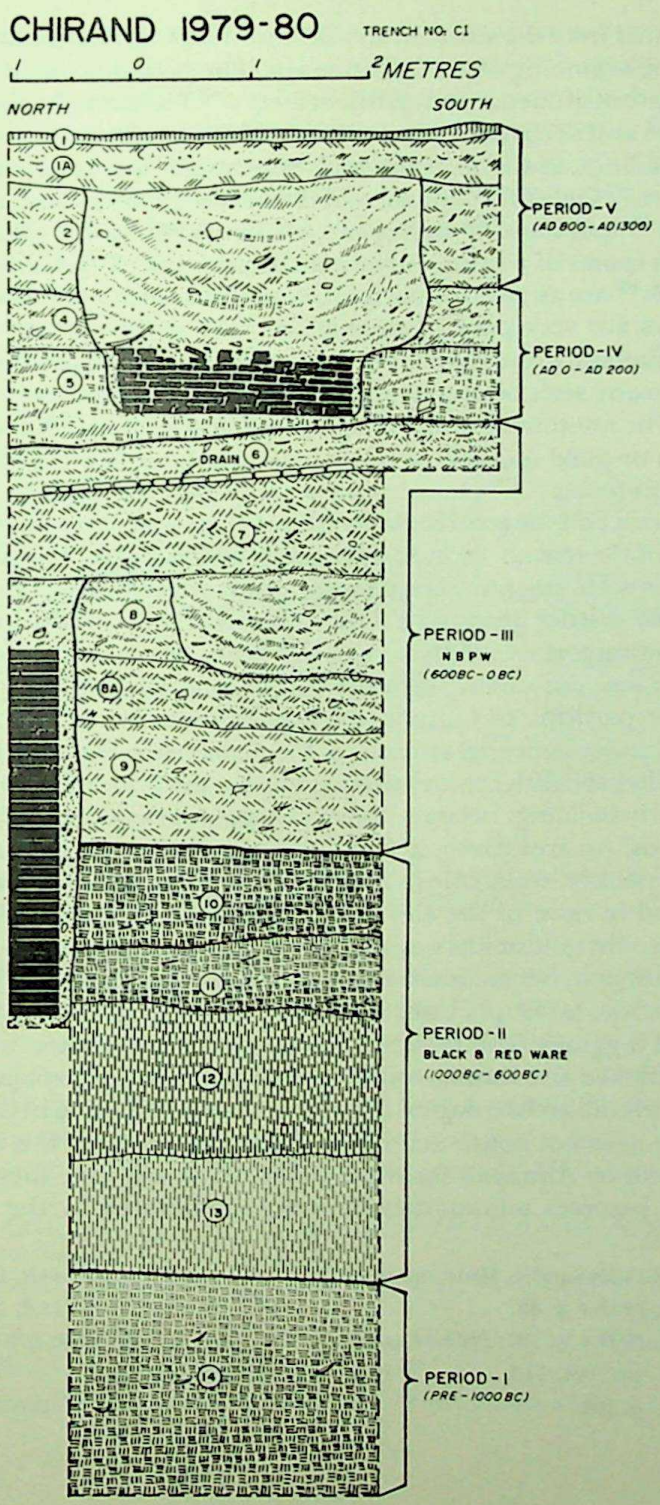


FIG. 10. Chirand, 1979-80, Trench No. C 1 after Basudev Narayana (unpublished).

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Inhabited from the sixth century BC onwards, Vaishali became prosperous by the beginning of the Christian era. The period 50 BC-AD 200 is called 'a phase of affluence and artistic activity'.[192] The period associated with sprinklers and deep bowls, characteristic of the Kuṣāṇa age, had extensive brick buildings, and one of the walls was traced to a length of seventy-seven feet.[193] Only the foundation of the buildings discovered belonged to Imperial Gupta times.[194] In one case we find a fifty-seven feet long brick wall with rooms of varying dimensions attached to it.[195] About one thousand seals[196] are ascribed to the fourth and fifth centuries.[197] But the Gupta structures are very poor in comparison with earlier constructions. On palaeographical grounds many seals may be assigned to the third century. A good many seals belong to artisans, traders and merchants or to their guilds. The most numerous among the seal inscriptions refer to "the corporation or guild (*nigama*) of bankers (*śreṣṭhin*), traders (*sārthāvāha*), and merchants (*kulika*)".[198] However the term *śreṣṭhin* may be better rendered as merchant and the term *kulika* as artisan. This seal inscription forms the content of the seal no. 29 in Bloch's list,[199] which occurs 274 times.[200] It is held that seals suggest considerable commercial transactions between chiefs and district heads of Tīrabhukti residing at Vaishali on the one hand and important traders, evidently from Patna and other cities.[201] Business was also carried with the royal family of Vaishali.[202] Whoever may have participated in trade, the *nigama* seals clearly attest organized artisanal and commercial activities in Vaishali during the third to fifth centuries. After the fifth century there is hardly any trace of such activities.

Similarly buildings become poor in Gupta times and almost disappear afterwards. An area covering 9900 sq.ft. shows signs of habitation in the form of pottery, seals, coins, terracottas and ring wells. Brick structures are found in most of the eleven pits that were excavated. A terracotta mould used by goldsmiths was also found. The period of habitation ranges from Maurya to Gupta times. But although Gupta seals have been found in excavation, no Gupta coins have been found in spite of extensive and repeated diggings. This is in contrast to earlier times when we get many punch-marked and Kuṣāṇa coins. Even Gupta structures are poor. Therefore the overall archaeological impression is one of decline in Gupta times. Fa-hsien does not notice deterioration but he speaks of the ruins of the tower built by Āmrapālī for the Buddha.[203] In any case the post-Gupta Vaishali becomes unimportant.This is corroborated by the account of

[192] Krishnadeva and V. Misra, op. cit., p. 3.
[193] *IAR, 1958-59*, p. 12.
[194] *ASR, 1903-4*, p. 88.
[195] *IAR, 1953-59*, p. 12.
[196] *ASR, 1903-4*, p. 101; *1913-14*, p. 99.
[197] *ASR, 1903-4*, pp. 101-2.
[198] Ibid., pp. 104, 110.
[199] Ibid.
[200] Ibid., p. 101.
[201] Ibid., p. 88.
[202] Ibid., p. 104.
[203] *Si-Yu-Ki*, pp. lii-liii.

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Hsüan Tsang, who speaks of the decline of the city in post-Gupta times.[204] There are very few ruins which so closely resemble his description and which can be easily identified.[205] Since Vaishali was very likely the headquarters of Tīrbhukti, a district or division of the Gupta empire, Bloch attributes its ruin and desertion to the breakdown of the imperial line of the Gupta kings.[206] This explanation may not be adequate, but there is no doubt that "for several centuries it [Vaishali] continued a sort of struggling existence"[207] (Fig. 11).

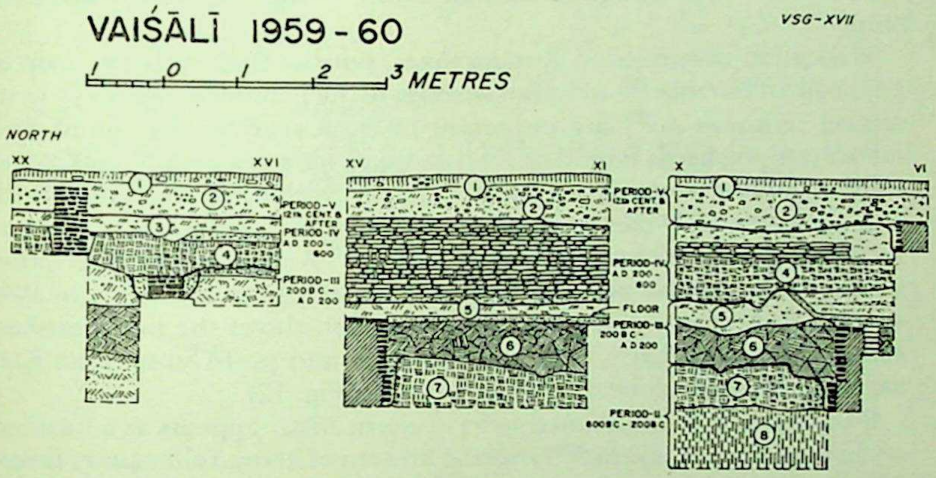


FIG. 11. Vaiśālī, 1959-60 VSG-XVII after B.P. Sinha and Sita Ram Roy, *Vaiśālī Excavations 1958-62*, Patna, 1969, fig. 9.

The neighbouring site of Katragarh in Muzaffarpur district was excavated on a large scale for five seasons covering five years.[208] It was fortified in the second century BC in three phases and provided with a moat.[209] Baked bricks were used in the first and third phases, and the whole fortification belonged to Śuṅga times.[210] The Śuṅga period shows 'intensive building activities' in baked brick.[211] The town had a huge, long drain which drained off its water to the Bagmati river.[212] Uninscribed copper

[204] *Si-Yu-Ki*, II, p. 66.
[205] Samuel Beal, *The Life of Hiuen Tsiang*, pp. 100-10.
[206] *ASR, 1903-4*, p. 83.
[207] Ibid.
[208] *IAR, 1975-76*, p. 8; *1976-77*, pp. 12-13; *1977-78*, pp. 15-16; *1978-79*, p. 67; *1979-80*, p. 14.
[209] *IAR, 1977-78*, p. 15.
[210] Ibid., pp. 15-16.
[211] *IAR, 1976-77*, p. 12; *1979-80*, p. 14.
[212] Information from K.K. Sharma who was one of the excavators.

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coins[213] suggest the use of money, and terracotta seals and sealings[214] indicate sale transactions. Although writing appears later, in the first century AD, the fortified township flourished in Śuṅga times. This is demonstrated not only by extensive brickwork, varieties of pottery, semiprecious stone objects, skin rubbers, etc., but also by sophisticated terracotta objects.[215] Terracottas include the usual beads, wheel, dice, toy-carts, potter's dabber, and figures of ram, horse, bull and birds.[216] A mould for human head[217] deserves attention. What is more significant, plaques of human figurines, both male and female, show elaborate coiffure and heavy ornamentation.[218] The Śuṅga terracottas evince a high order of craftsmanship.[219]

Habitation continued in Kuṣāṇa times, but the finds become poor. A gold coin of Huviṣka[220] and a few sealings in the Brāhmī script of the first-second centuries AD[221] are important finds. A crucible was found, and micaceous potsherds typical of Kuṣāṇa times were noticed.[222] Pots in red ware including sprinklers appear.[223] Structures comprise single-brick walls, and probably tiles were used for roofing.[224] Some pottery and terracotta figurines belong to the Gupta period.[225] A fragmentary inscription is assigned to the Pāla period,[226] without indicating any century. The Pāla structures were made of reused bricks "which shows the impoverished state of culture".[227] It is clear that in Gupta and post-Gupta times Katragarh had largely gone out of habitation[228] (Fig. 12).

Balirajgarh in Madhubani district in north Bihar appears as a fortified settlement around 200 BC[229] covering an area of about four square miles. The first phase (*c.* second century BC to *c.* second century AD) shows a residential structure and Śuṅga terracotta plaques. Wheels, toy-carts and animal figurines made of clay occur. We also get iron nails and crucible, copper, antimony rods and beads of semiprecious stones. A terracotta sealing and cast copper coins also appear.[230] The second phase (second to sixth century AD) shows stone beads, terracotta balls, beads and figurines[231] but no structure. Evidently the place was in a poor shape in Gupta times.

Situated in the Gandak Valley, some twenty-five km to the north-west of Bettiah, in Champaran district, Lauriya-Nandangarh is well known for its Aśokan pillar.[232] Digging has exposed here a huge stupa and many signs

[213] *IAR, 1975-76*, p. 8; *1976-77*, p. 12. [214] *IAR, 1975-76*, p. 3; *1976-77*, p. 12.
[215] *IAR, 1975-76*, p. 8. [216] Ibid. [217] Ibid. [218] *IAR, 1977-78*, p. 16.
[219] *IAR, 1976-77*, p. 12. [220] Ibid. [221] *IAR, 1979-80*, p. 14.
[222] Information from K.K. Sharma. [223] *IAR, 1976-77*, p. 12. [224] Ibid.
[225] *IAR, 1975-76*, p. 8. [226] *IAR, 1976-77*, p. 13. [227] Ibid.
[228] Also based on personal observation. [229] *IAR, 1972-73*, p. 7; *1974-75*, p. 10.
[230] *IAR, 1972-73*, p. 7; *1974-75*, p. 10. [231] *IAR, 1972-73*, p. 7; *1974-75*, p. 10.
[232] *ASR, 1935-36*, p. 55.

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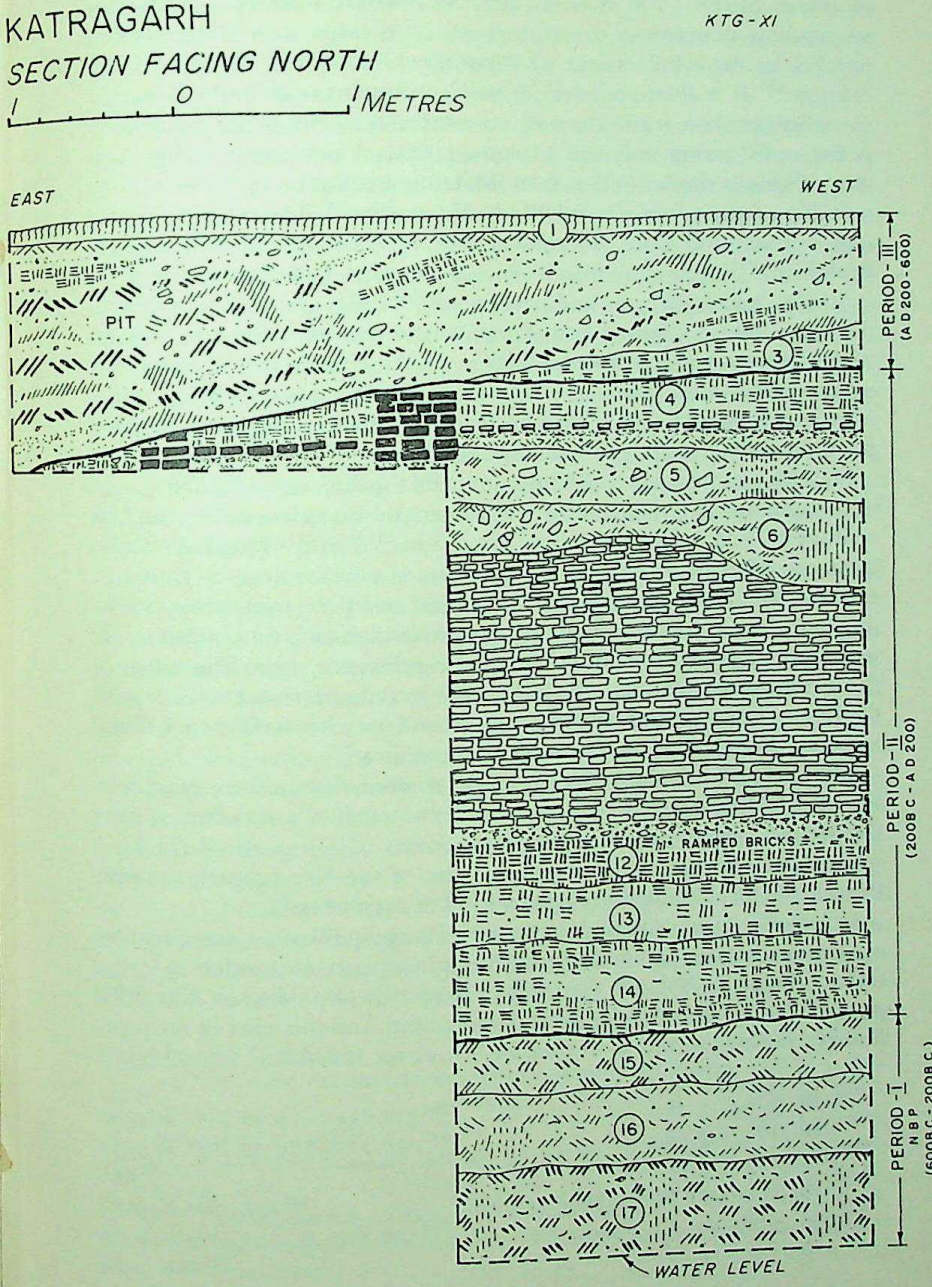


FIG. 12. Katragarh KTG XI section facing north after Sita Ram Roy (unpublished).

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of urban life in *c.*200 BC-*c.*AD 200. As a single brick-built edifice of stupendous dimensions the eighty feet high stupa is perhaps without parallel in the whole range of monuments of *c.* 200 BC to which it belongs.[233] It is surrounded by a massive rampart wall, and the buried structures between it and the wall indicate the existence of the city area.[234] A few wells, a ring well and a large quantity of pottery including pan-shaped vessels similar to that from Bhita have been found.[235] Numerous terracotta figurines of about 200 BC also appear.[236] The majority represent women, and since the mother cult was not associated with early Buddhism,[237] these may have been used as toys. Iron objects comprise awls, celts, knives, daggers and arrowheads.[238] Coins and sealings found in the stupa indicate trading and artisanal activities. In addition to Kuṣāṇa copper coins, several coppers of earlier times including cast copper coins of the second century BC have been found.[239] What is significant, a terracotta coin mould with a Brāhmī legend and also a lead piece corresponding to the mould have been found.[240]

N.G. Majumdar finds it difficult to explain the discovery of a coin mould in the remains of a religious establishment and hence considers the first century BC lead piece a token and not a coin.[241] But the monetary donations recorded by artisans and merchants at various ancient Buddhist establishments explain the find of the mould and of the coin turned out by it. The coin mould suggests that Lauriya-Nandangarh was a mint town, which evidently procured lead through long-distance trade. The names of the owners of the seals mentioned in a few inscribed terracotta sealings of the first century BC might include artisans and merchants. One such name is that of Śivadāsa and the other of Brahmamitra.[242]

The various finds show that the stupa "existed even in the second century AD".[243] It seems that the stupa area remained mostly unoccupied after the second century. Some structural remains of a superficial (flimsy?) stratum were found on the topmost point of the Nandangarh mound; these could be as late as the Gupta period or even later.[244]

In regard to towns situated south of the Ganga in Bihar we may consider excavations carried out at Buxar in Bhojpur district, Kumrahar in Patna district, Rajgir in Nalanda district and Sonpur in Gaya district. The NBP phase at Buxar shows better signs of habitation, and the relics of the post-Maurya period are not so impressive. However sprinklers, typical bowls

[233] *ASR, 1936-37*, p. 49.
[234] *ASR, 1936-37*, p. 49; *1935-36*, p. 66.
[235] *ASR, 1935-36*, p. 66.
[236] *ASR, 1936-37*, p. 50; *1935-36*, p. 64.
[237] *ASR, 1936-37*, p. 50.
[238] Ibid.
[239] *ASR, 1935-36*, pp. 63-64; *1936-37*, pp. 49-50.
[240] *ASR, 1936-37*, p. 49.
[241] Ibid., p. 50.
[242] *ASR, 1935-36*, p. 63; *1936-37*, p. 49.
[243] *ASR, 1936-37*, p. 50.
[244] Ibid., p. 64.

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and jars, and terracotta figures with the Kuṣāṇa type of dresses have been discovered.[245] The relics of the Gupta period have so far been strikingly absent, and the site, probably discarded in Gupta and post-Gupta times, was reoccupied by the users of medieval glazed ware.[246]

The Maurya and the post-Maurya phase up to AD 300 is well represented at Kumrahar but the period AD 300-600 shows symptoms of decline. The period AD 300-450 shows a structure, mainly of brickbats, in a dilapidated condition, although it contains an oven of six courses.[247] The stratum covering AD 450-600 contains red ware of coarse fabric and a few inscribed sherds in the Gupta character, but the other antiquities of the Gupta period are wanting.[248] On the contrary Kumrahar is rich in Kuṣāṇa brick structures and terracotta.[249] Although the monastic structures are assigned a long period (150 BC-AD 600) and the area shows habitation from the Maurya period to about AD 600,[250] most structures belong to pre-Gupta and early Gupta times. Seals and coins range from the third century BC to Gupta times.[251] Coins from Kumrahar comprise punch-marked, Kuṣāṇa and Gupta varieties.[252] Altogether they number more than two hundred,[253] but the post-Gupta period lacks both coins and seals. Of course we find Mughal coins.[254]

Fa-hsien's account shows that Pāṭaliputra was in a good shape, although he found the palace of Aśoka in ruins.[255] But speaking of Magadha he says that of all the kingdoms of mid-India the towns of this country are specially large, and the people are rich and prosperous.[256] Yet speaking of the old city called Kusumapura or Pāṭaliputra Hsüan Tsang states that it has been long deserted although walls survive.[257] On the basis of the Chinese pilgrim's observation it is estimated that in the seventh century the ruins of Aśoka's city were still twelve to fourteen miles in circuit.[258] Hsüan Tsang adds that the *saṃghārāmas* and Deva temples which lie in ruins can be counted in hundreds; only two or three remain intact. To the north of the old palace and bordering on the Ganga he notices a little town, containing about one thousand houses.[259] This settlement may have been a part of the old Pāṭaliputra. An idea of the decline of the ancient city in late Gupta and post-Gupta times can also be obtained from the excavation reports on Mahabir Ghat and two other sites[260] (Fig. 13).

[245] *IAR, 1965-66*, p. 21. [246] Ibid.
[247] A.S. Altekar and Vijayakant Mishra, *Report on Kumrahar Excavations, 1951-55*, p. 29.
[248] Ibid., p. 20. [249] Ibid. [250] Ibid., pp. 15-16.
[251] *ASR, 1912-13*, pp. 82-86. [252] Ibid., pp. 84-86.
[253] Vijayakant Mishra, *Kumrahar* (in Hindi), pp. 7-8, 18. [254] *ASR, 1912-13*, pp. 84-86.
[255] *Si-Yu-Ki*, p. iv. [256] Ibid., p. lvi. [257] *Si-Yu-Ki*, II, pp. 82-83.
[258] L.A. Waddell, *Report on the Excavations at Pataliputra*, p. 20. [259] *Si-Yu-Ki*, I, p. 86.
[260] These reports appear in B.P. Sinha and Lala Aditya Narain, *Pāṭaliputra Excavation*, Patna, 1970; especially see p. 56.

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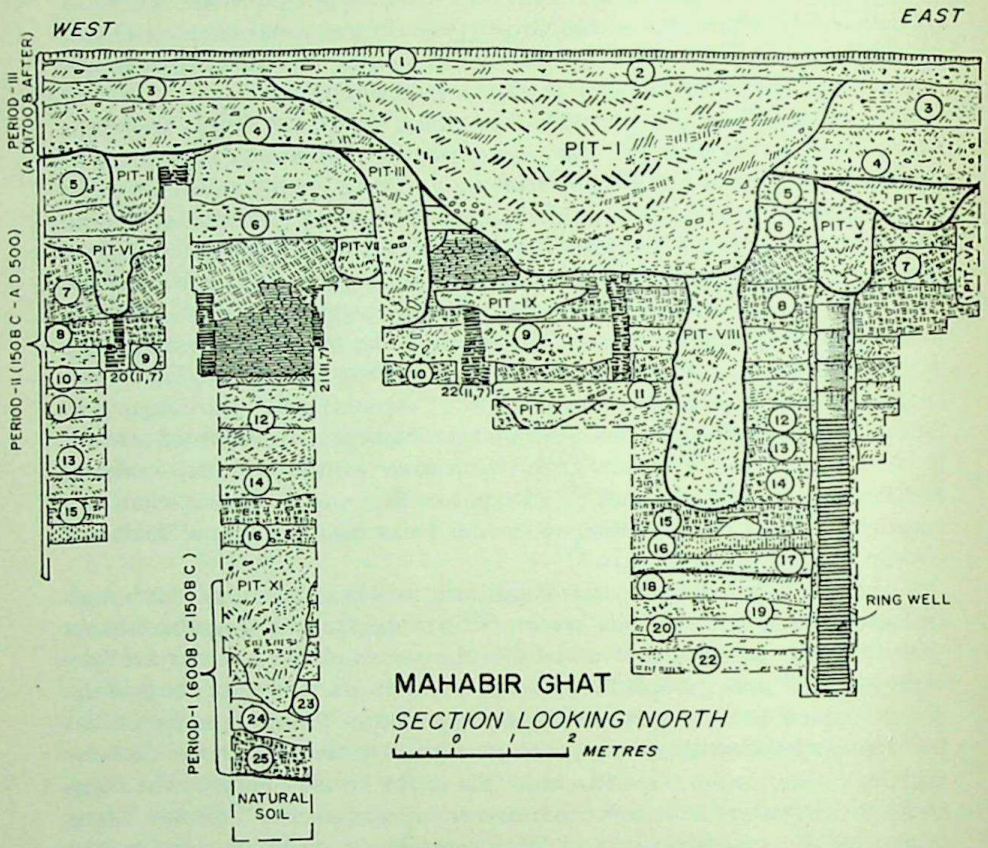


FIG. 13. Mahabir Ghat section looking north after B.P. Sinha and L.A. Narain, *Pāṭaliputra Excavation 1955-56*, Patna, 1970, fig. 3.

Enclosed by its twenty-five-mile hilly defences, reinforced with a rubble wall, Rajgir[261] in Nalanda district was historically older than Pāṭaliputra by a century or so. Although it was the first capital of Magadha, it has been excavated on a very limited scale. The period from the first century BC to the first century AD provides traces of three roads.[262] The first century AD appears as the last phase of occupation, but it has yielded only some thick jars, bowls of a bright colour, and terracotta objects.[263] Rajgir seems to have become primarily a religious place by the Gupta period when the Maniyar Matha was set up and embellished with stuccos. By and large, the place had lost its urban character. When Fa-hsien visited this sacred place of

[261] *AI*, no. 7, p. 65. [262] Ibid., pp. 70-71, 72-78. [263] Ibid., pp. 70-71.

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Buddhists, he found the old, hill-surrounded city in a state of decline. He tells us that within the city all is desolate and it is without inhabitants.[264] According to him the new Rājagṛha built by Ajātaśatru had only two *saṃghārāmas* or monasteries.[265] The decline of Rajgir after the first century AD is supported by the limited excavation done so far (Fig. 14).

Bodh Gaya, where excavation is in progress at a site called Taradih, was an important town till the beginning of the Gupta period. But according to Fa-hsien all within the city of Gaya was desolate and deserted when he visited it.[266] It developed as a pilgrimage centre *(tīrtha)* in early medieval times.

The only place excavated near Gaya is Sonpur. The Kuṣāṇa period in it is very well represented. Burnt brick structures from the upper level of the period are ascribed to AD 200. On account of limited excavations no complete plan of any structure has been discovered, but this phase has yielded iron objects such as nails, knife-blade, lances, axes, daggers, etc.[267] Metal ornaments were prepared mainly of copper. Ivory objects included a decorated piece. The bulk of the terracotta objects come from 2000 BC-AD 200 and the moulded varieties represent artistic skill. Copper punch-marked and cast coins were found. Inscribed terracotta sealings were also unearthed. We notice more signs of habitation in the Kuṣāṇa phase than in the earlier phase, and the report does not mention any post-Kuṣāṇa antiquities at Sonpur.[268]

The chronological sequence in Champa identical with Champanagar in Bhagalpur district is not clearly indicated by the excavator.[269] The place, which had a mud rampart, was occupied in the NBP phase, but the late phase of the fortification shows Śuṅga terracotta figurines and plaques as well as terracotta sealings. Apart from iron objects, cast copper coins and punch-marked coins are also associated with it.[270] Two ring wells are also found in the same phase.[271] The 'late NBP ware phase' shows a brick wall. Three other structures occur. The first comprises four rooms, the second four rooms, and the third a big hall and two rooms.[272] The 'phase' also exposed a spoon, a pendant and plaques, all made of terracotta.[273] Apparently this level belonged to the second-first century BC. Ivory beads[274] probably come from this period.

[264] *Si-Yu-Ki*, p. lix.
[265] Ibid., p. lviii.
[266] Ibid., p. lxi, Gaya obviously refers here to Bodh Gaya.
[267] B.P. Sinha and B.S. Varma, *Sonpur Excavations (1956 and 1959-62)*, pp. 10-11.
[268] Ibid.
[269] For adopting varying stratigraphical positions see *IAR, 1969-70*, p. 2; *1970-71*, pp. 4-5; *1971-72*, p. 5; *1972-73*, pp. 6-7; *1974-75*, pp. 8-9; *1975-76*, pp.7-8; *1976-77*, pp. 11-12.
[270] *IAR, 1969-70*, p. 2.
[271] *IAR, 1970-71*, p. 5.
[272] *IAR, 1975-76*, p. 8.
[273] *IAR, 1974-75*, p. 9.
[274] *IAR, 1972-73*, p. 7.

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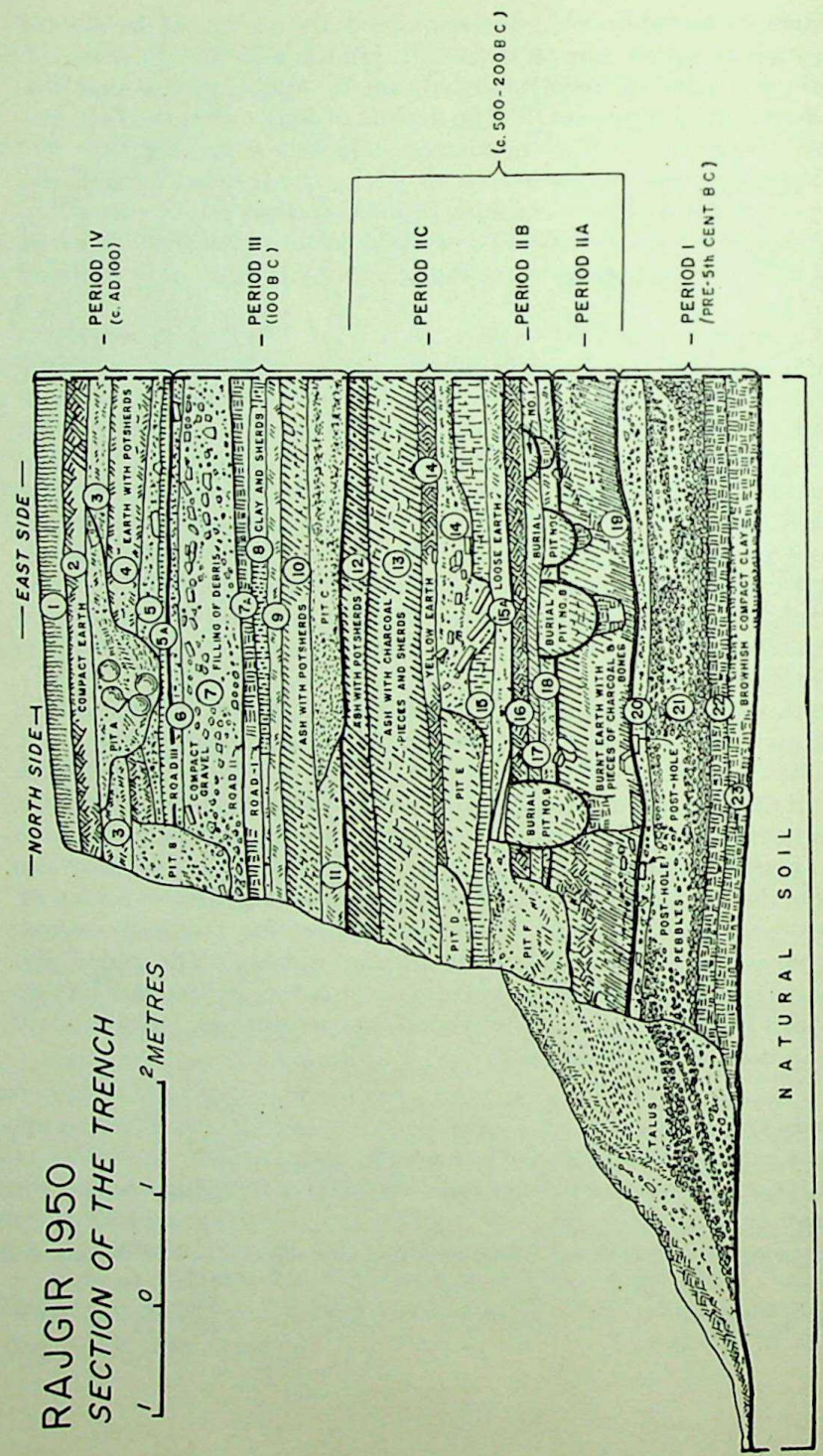


FIG. 14. Rajgir 1950 section of the trench after A. Ghosh, "Rājgir 1950", *AI*, no. 7, 1951, Plate XXIX.

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Terracotta pieces, ivory objects, stone and glass beads and a bangle are attributed to the Gupta period,[275] but no structures are mentioned. This is in contrast to the Kuṣāṇa period which shows two rooms.[276] Some bronze figurines and terracotta sealings and figurines are attributed to Gupta and Pāla periods,[277] but the distinction between the Gupta and Pāla in respect of these objects is not drawn. After the second century AD or so the site was practically deserted, for the material remains of Gupta times are very poor (Fig. 15).

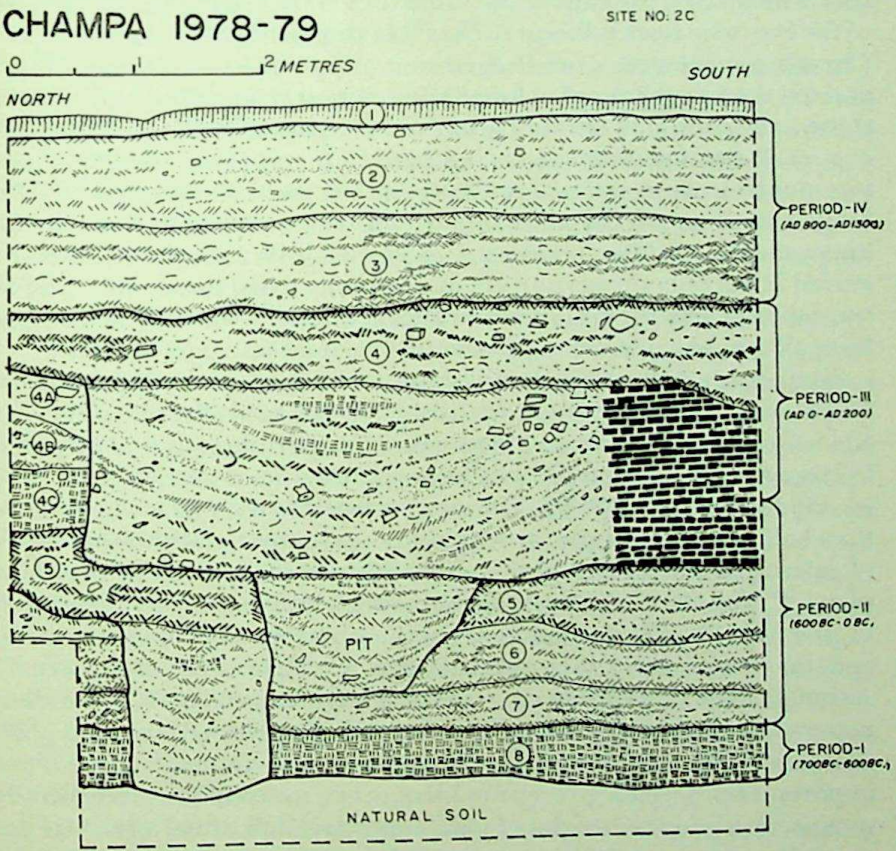


FIG. 15. Champa 1978-79-Site No. 2C after Basudev Narayana (unpublished).

Fa-hsien states that 'there are still resident priests' in Champa,[278] but apparently they seem to have been very few. Hsüan Tsang found there

[275] *IAR, 1975-76*, p. 7. [276] Ibid., p. 8. [277] Ibid. [278] *Si-Yu-Ki*, p. lxxi.

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numerous *saṃghārāmas*, mostly in ruins, with about two hundred priests.[279] He also noticed there some twenty brahmanical temples frequented by various people.[280] It is not clear whether these religious structures lay in the town of Champa or in its neighbourhood. Hsüan Tsang states that the walls (which were made of bricks) of the capital were very high,[281] but does not say whether the place was inhabited.

In contrast to Bihar the number of early historical sites in Orissa is very small. A few towns are found in the coastal area. Jaugada in Ganjam district is situated on the bank of the Rishikulya.[282] It is really known for a set of the Fourteen Rock Edicts of Aśoka.[283] In this fortified site, Period I (pre-Christian) represents a full-fledged iron-using culture, and shows black and red ware as well as red polished ware. Period II is marked by brick and stone structures, fine beads of semiprecious stones, shell, terracotta and copper. We also get iron objects meant for war and peace. Besides a solitary punch-marked coin, eleven Puri-Kuṣāṇa coins were found.[284] The finds lend an urban character to Jaugada, which is called a town by the excavator.[285] The "free occurrence of Puri-Kuṣāṇa coins in the levels of Period II not only suggests an era of prosperity when these coins were in use but also sets the upper limit of the period".[286] On the analogy of Sisupalgarh, Jaugada did not last beyond the mid-fourth century AD.

Sisupalgarh in Puri district lies close to Bhubaneswar, the capital of Orissa, and possibly represents Tosalī of Aśoka's Dhauli edicts and Kaliṅganagara of Khāravela's Hathigumpha inscription. It was subjected to large-scale excavations,[287] which showed that it was occupied in *c.* 300 BC and fortified in *c.* 200 BC. The area enclosed by the fort is a little more than half a square mile. Its earth rampart was renovated with a thick layer of laterite in the second phase, and with two brick walls in the third phase.[288] The fortified area enclosed a town, which existed between *c.* 200 BC and *c.* AD 350.[289] The houses were built with bricks or cut laterite slabs, and the streets seem to have been laid on a chess-board pattern.[290] Although a few NBP sherds occur in late levels of around AD 100, the main pottery included black-and-red ware, bright, red polished ware and plain red ware.[291] Sherds of rouletted ware were also found.[292] The other important finds which give a prominent urban touch to the place include semiprecious stones, bangles of glass and ivory, numerous terracotta ear

[279] *Si-Yu-Ki*, II, p. 192. [280] Ibid. [281] Ibid. [282] *IAR, 1956-57*, p. 30.
[283] Ibid. [284] Ibid., pp. 30-31. [285] Ibid., p. 31. [286] *IAR, 1956-57*, p. 31.
[287] B.B. Lal, "Sisupalgarh 1948: An Early Historical Fort in Eastern India", *AI*, no. 5, pp. 62-105.
[288] *AI*, no. 5, p. 64; *AI*, no. 9, p. 168. [289] *AI*, no. 9, pp. 168-69.
[290] Ibid., p. 168. [291] Ibid., p. 169.
[292] Ibid.

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ornaments, coin moulds and thirty-one coins.[293] The coins include a copper coin of Huviṣka, a gold coin in imitation of that of Vāsudeva and some Puri-Kuṣāṇa coins.[294] Clay bullae or lockets imitating Roman coins have also been found.[295] We also get numerous terracotta seals and sealings.[296] Plenty of iron objects including nails, spokes, staples, sickles, knife-blades, borers, daggers, caltrops, arrowheads and spearheads have been found.[297] Although urbanism lasted from 200 BC to AD 350, the Sisupalgarh culture reached its 'full bloom' in 200 BC-AD 100, when it was marked by sophisticated pottery, predominance of the bright red polished ware, and structures of large chiselled laterite blocks.[298]

The period AD 100-200 shows this culture in decline and transition.[299] Around *c.* AD 200 there seems to be a break in occupation which may not have covered the whole site.[300] But by this time the red polished ware had degenerated so much in fabric and technique that it had changed to ill-fired, ochre-washed ware.[301] Large-scale excavations leave no doubt that the site of Sisupalgarh, which lies in the plains, did not remain occupied beyond *c.* AD 350.[302] We do not hear of any finds ascribable to a date after the mid-fourth century.

The coastal area of West Bengal shows a couple of towns in early historic times, but they also declined in Gupta and post-Gupta periods. Tamluk, identical with the ancient port-town Tāmralipti, lies in Midnapur district on the right bank of the Rupnarayan river. Settlement began here in pre-NBP times, although NBP may have appeared at this site around *c.* 300 BC. The NBP phase shows burnt floor, terracotta figurines and cast copper coins.[303] The post-NBP period comprising Śuṅga and Kuṣāṇa phases is marked by typical Śuṅga bowls, rouletted ware, sprinkler, and a stepped tank of brick.[304] Explored semiprecious stones probably belong to Śuṅga and Kuṣāṇa times, but the seals belong to the Gupta period. At any rate the site seems to have been practically abandoned after the third century AD. Fa-hsien speaks of the kingdom of Tāmralipti in which he noticed twenty-four monasteries *(saṃghārāmas)* with resident priests, but he is silent about the port-town. He took a great merchant vessel from some place at 'the sea-mouth',[305] which is not considered important enough to be mentioned by name.

Chandraketugarh in 24 Parganas district was an ancient port-town on the coast of the Bay of Bengal. It lies thirty-eight km north-east of Calcutta. Habitation started here with the NBP Ware, which occurs along with

[293] Ibid., p. 169; *AI*, no. 5, pp. 62-105. [294] *AI*, no. 9, p. 169. [295] Ibid.
[296] *AI*, no. 5, pp. 62-105. [297] Ibid. [298] Ibid., pp. 68-72.
[299] Ibid. p. 68. [300] Ibid., p. 70. [301] Ibid., p. 67. [302] Ibid.
[303] *IAR, 1954-55*, p. 20; *1973-74*, p. 33. [304] *IAR, 1954-55*, p. 20; *1973-74*, p. 33.
[305] *Si-Yu-Ki*, p. lxxi.

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silver and copper punch-marked coins, and stone and terracotta beads.[306] Some sherds inscribed in the early Brāhmī script belong to Śuṅga times.[307] The Śuṅga and Kuṣāṇa phases show house-complexes of rammed *surkhī* floors with wattle-and-daub walls, tile roofs, grain storage rooms and terracotta ring wells.[308] Ivory objects and typical ceramics associated with the rouletted ware are found.[309] Ivory objects also belong to the pre-Śuṅga period, when several copper punch-marked coins with ship motifs or of the ship type appear.[310] All this would suggest that Chandraketugarh was a port-town. The Gupta period was distinguished by an important brick temple with miniature shrines on the sides. The religious structures continued in post-Gupta times.[311] The main temple had three structural phases, one in Gupta and two in post-Gupta times.[312] Apart from the temple, the Gupta phase shows remnants of brick structures, and a ring well made of thick and large terracotta rings.[313] A Sūrya plaque and a bust of Viṣṇu in sandstone were found.[314] Gupta and post-Gupta antiquities do not seem to be of such a nature as would attest the commercial activities of Chandraketugarh. They consist of terracotta fragments, stone sculptures and fragments of stucco floral decorative motifs.

Situated on the bank of the Darkeswar river, Dihar in Bankura district began as a chalcolithic site. But it seems to have become a townlet in the early historic period. The occupational deposits of the period accounted for four layers.[315] We have no idea of their thickness, although both the chalcolithic and early historical periods together possessed a cultural deposit of two metres at its maximum.[316] The early historic period was marked by the use of iron and 'Śuṅga and Kuṣāṇa' pottery. It also showed many stone beads, terracotta objects, and cast copper coins.[317] It is clear that the site was abandoned after the second century AD, for it did not have deposits of post-Kuṣāṇa times.

Bangarh in West Dinajpur district is located on the eastern bank of the Punarbhava river, a feeder of the Padma which is a major tributary of the Ganga. Specimens of the NBP, a ring well, terracottas and punch-marked silver and copper coins are ascribed to pre-Śuṅga times.[318] The same coins

[306] *IAR, 1965-66*, p. 59.

[307] K.G. Goswami, "Chandraketugarh, and Its Archaeological Importance", *Indian Museum Bulletin*, no. 1, pp. 42-46.

[308] *IAR, 1965-66*, pp. 59-60. [309] Ibid. [310] *IAR, 1966-67*, p. 48; *1962-63*, p. 46.

[311] *IAR, 1966-67*, p. 48. [312] *IAR, 1965-66*, p. 59. [313] Ibid., p. 60.

[314] *IAR, 1966-67*, p. 48. [315] *IAR, 1983-84*, pp. 92-93. [316] Ibid., p. 92.

[317] Ibid., p. 93.

[318] K.G. Goswami, *Excavation at Bangarh (1938-1941)*, Ashutosh Museum, Memoir no. 1, p. 111; Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, p. 78.

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also continue in the Śuṅga period, which is marked by prosperous buildings, drains, cess-pits and a brick-built rampart wall.[319] The Gupta period shows walls, terracotta beads, copper and ivory sticks, iron implements, etc. Under the Pālas the rampart wall was raised higher. The Pāla period also shows a lotus-shaped small tank, carved bricks and stone sculptures.[320] Thus there was a continuity of occupation at this site, but in Gupta and post-Gupta times coins are not found.

We have some early historical sites in north Bengal (covered at present by both West Bengal and Bangladesh) and also a few port-towns on the coast of the Bay of Bengal. But very few historical sites are known in Assam. One of them is Ambari in Kamrup district. It is located as a suburb of Guwahati on the bank of an old channel of the Brahmaputra, the present course of the river being one km to the south.[321] The earliest phase shows similarities with the antiquities found at Sisupalgarh, and may belong to the early centuries of the Christian era.[322] Phase II yielded red, buff and kaolin wares; the last ware may indicate Chinese connections in early times. The site does not seem to be important after the fourth century. The advent of phase III is attributed to the seventh century,[323] but the occurrence of a few sherds of the Chinese celadon ware as also the radiocarbon dating (AD 895 ± 105)[324] suggests that Ambari was reoccupied only in the tenth century or later.

Urbanism shows a longer life in eastern Uttar Pradesh and Bihar. Its components appear with the advent of the Northern Black Polished Ware in the sixth century BC and its climax is reached during the period from *c.* 300 BC to *c.* AD 300. In the fourth to the sixth centuries the disintegration of urbanism is visible at Kauśāmbī, Bhita, Rajghat, Vaishali, Kumrahar and Champa. At Śrāvastī, Ganwaria, Mason, Khairadih, Manjhi, Chirand, Katragarh, Buxar, Sonpur and Rajgir the Gupta phase in urbanism is almost unrepresented. Excavated sites in Orissa and West Bengal show the beginnings of urbanization around 300 BC and its end around AD 300.

[319] Ibid. [320] Ibid. [321] *IAR, 1968-69*, p. 5. [322] *IAR, 1970-71*, p. 4.
[323] Ibid. [324] Ibid.

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4

Urban Growth and Decay: Central and Western Regions

The archaeology of towns in western and central India generally follows the pattern in the Indo-Gangetic plains, particularly in the third and post-third centuries. Towns appeared in these regions rather late — in about the third or the second century BC — but they generally suffered decline and desertion after the third century AD.

We may start our survey with Rajasthan. Its north-eastern areas were closely linked with the adjoining Gangetic plains in the development of material culture. Noh in Bharatpur district shows no signs of habitation after Kuṣāṇa times.[1] Its post-NBP phase contains cast copper coins, terracotta animal figurines, flesh rubbers, bangles of glass and beads of semiprecious stones.[2] Several indications of smelting were found in Noh, but special mention may be made of a well-preserved smelting furnace with a large quantity of iron slag.[3] The thriving occupation in the Kuṣāṇa period is indicated by its eight structural phases in which baked bricks of uniform size were used.[4] We do not notice any structure or antiquity after the third century in Noh.[5] Evidently the settlement was deserted.

Bairat (also called Viratnagar) in Jaipur is famous for the discovery of an Aśokan inscription. The site shows PGW and NBP associations.[6] The NBP potsherds, representing alms-bowls, recovered from here were rivetted with copper pins.[7] Evidently they were prized higher and obtained in exchange from some NBP centre. In post-Maurya times evidence of monetary exchange is provided by the find of several types of coins. Punch-marked coins were found wrapped in a piece of cotton cloth.[8] These coins[9] were in circulation here till the first century AD.[10] Thirty-six Greek and Indo-Greek coins ranging from *c.* 140 BC to AD 20-45 were also found.[11] Bairat has a brick-built temple of the Maurya age, probably the

[1] *IAR, 1968-69*, p. 26. [2] *IAR, 1965-66*, p. 38; *1970-71*, p. 32; *1971-72*, p. 42.
[3] *IAR, 1956-66*, p. 38; *1970-71*, p. 32; *1971-72*, p. 42.
[4] *IAR, 1965-66*, p. 38; *1971-72*, p. 42. [5] *IAR, 1965-66*, p. 38; *1971-72*, p. 42.
[6] *IAR, 1962-63*, p. 31. [7] *AI*, no.9, p. 153f; *ASR, 1935-36*, p. 86.
[8] *ASR, 1935-36*, p. 86. [9] *AI*, no.9, p. 153. [10] *ASR, 1935-36*, p. 86.
[11] Ibid.

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oldest known temple in north India.[12] Post-Maurya levels and the deposits of the early centuries of the Christian era show miniature jars and bottles, lids with lamps on the rim, and clay lamps with a central tube to suspend them. Although structures are lacking potsherds with impressed designs appear.[13] The occupational history of Bairat is linked with the fortunes of the Buddhist monastery which was set up before the second century BC; it is different from the Maurya brick-built temple. As is evident from the find of coins near the eastern wall of the monastery, its occupation continued till the first century AD. No objects belong to a date later than the second century AD when the whole monastery must have been deserted.[14] After the second century or a little later the site was apparently abandoned. It was reoccupied in the 'medieval' period.[15]

Habitation at Rairh in Jaipur district lasted from the third century BC to the second century AD. Later occupation can be traced in Gupta times.[16] As many as 115 ring wells have been found.[17] They may have either supplied water or served as soak-pits, which suggests congested population. The second function could not be attributed to brick wells which generally followed ring wells, and were primarily meant for supplying water. At Rairh pottery is decorated with impressed motifs.[18] We find concave lids with looped handles, vase-knobbed lids and miniature bottles, all ascribable to the early centuries of the Christian era.[19] Seals, beads and figurines made of terracotta occur. The site is noted for the find of numerous coins in excavations. They include hoards of the punch-marked and Malwa coins (*c.* 200 BC-*c.* AD 200) and of Mitra coins.[20]

Rairh was a flourishing centre of handicrafts between the third century BC and the second century AD. Its chief industry was iron metallurgy and the manufacture of iron tools and implements.[21] These tools were evidently supplied to the neighbouring villages and also sent to distant towns. Objects of gold, silver, lead and copper were also manufactured. Moreover the artisans specialized in the manufacture of polished stone heads decorated with etched patterns and also in that of conch, ivory, bronze and steatite objects.[22] Apparently the site was abandoned after the early Christian centuries, although marks of partial occupation in Gupta times have been found.[23]

Nagari in Chittorgarh district represents the traditional famous ancient

[12] Ibid., p. 85. [13] *AI*, no.9, p. 153. [14] *ASR, 1935-36*, p. 86.
[15] *AI,1962-63*, p. 31. [16] *IAR*, no. 9, p. 153.
[17] K.N.Puri, *Excavations at Rairh During Samvat Years 1995 & 1996 (1938-39 & 1939-40 AD)*, pp. 58-61.
[18] *AI*, no. 9, p. 153. [19] Ibid. [20] Ibid.
[21] K.N.Puri, *Excavations at Rairh*, p. 56. [22] Ibid.
[23] Ibid.

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Madhyamikā of the Śivi-*janapada*.[24] Digging shows it to be an important post-Maurya site. It has large wells, red polished and kaolin ware, and Śuṅga and Gupta terracotta including toys, beads and flesh rubbers.[25] An ivory seal with *svastika* and taurine symbols has been found.[26] More importantly, coins including punch-marked, tribal and Kṣatrapa varieties have been unearthed.[27] The site was fortified in the early Christian centuries, 'possibly' around the advent of the Guptas.[28] Otherwise very little is known about the Gupta period, when the main occupation seems to have declined.

The old settlement of Rang Mahal lies on the southern side of the Ghaggar, identical with the Sarasvatī river, near the town of Suratgarh, not far from Bikaner.[29] Period III of this site seems to represent the Kuṣāṇa phase. It shows walls, a house made of sun-dried bricks, drain-pipes, and decorated fired bricks.[30] The pottery includes red polished ware and perforated pots.[31] Terracotta carts, wheels, flesh rubbers, animal and human figurines, have been found.[32] Semiprecious stones, glass beads and bangles occur.[33] Human figurines in faience in addition to iron and bronze objects have been recovered.[34]

Excavation brought to light 105 copper coins, comprising tribal and punch-marked varieties, and the issues of Kaniṣka I, Huviṣka I and Vāsudeva II.[35] Bronze seals of around AD 300 have been found.[36] The excavator thinks that the site was deserted after *c.* AD 600 as a result of the drying of the Ghaggar.

In Madhya Pradesh, Jaderua in Gwalior district is located not too far from the upper Gangetic plains. In pre-Kuṣāṇa times it shows good signs of habitation between *c.* 350 BC and the second century BC. Rich in iron implements, it has several iron-smelting spots. Śuṅga terracottas, Nāga coins and other copper coins have been recovered. After the second century BC the site was abandoned, only to be reoccupied in about the ninth century AD.[37] Probably desertion took place around the first century AD.

Archaeological reports do not credit central and eastern Madhya Pradesh with many ancient urban settlements. Tripuri identical with Tewar in Jabalpur district in South Kosala was an important site.[38] Its occupation continued from *c.* 500 BC to *c.* AD 400,[39] but the Sātavāhana and post-Sātavāhana periods are better known. Numerous coins of lead,

[24] *IAR, 1962-63*, pp. 19-20. [25] Ibid., p. 19. [26] Ibid. [27] Ibid.
[28] *IAR, 1962-63*, p. 19.
[29] Hanna Rydh, *Rang Mahal: The Swedish Archaeological Expedition to India (1952-54)*, p. 5.
[30] Ibid., pp. 89-158. [31] Ibid. [32] Ibid., p. 160. [33] Ibid., pp. 166-69.
[34] Ibid., p. 170. [35] Ibid., pp. 171-76. [36] Ibid., p. 181.
[37] *IAR, 1971-72*, pp. 29-30.
[38] *IAR, 1965-66*, pp. 21-22; *1966-67*, pp. 17-19; *1967-68*, pp. 23-24; *1968-69*, pp. 11-12.
[39] *IAR, 1966-67*, p. 18.

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copper or potin belong to the Sātavāhanas and Kṣatrapas.[40] Some copper punch-marked and cast coins also occur.[41] In addition, the Sātavāhana phase possesses red polished ware, sprinklers, and kaolin wares.[42]

The post-Sātavāhana phase yielded sprinklers, mica-dusted pottery, punch-marked coins, iron and stone objects.[43] Baked clay sealings bearing inscriptions of the second-third century AD also appear.[44] Structures deteriorated in *c.* AD 200-400. The habitation deposits in this period are 1 to 1.5 feet thick, and this 'last occupation' shows 'very poor structure' marked by brickbats.[45] In contrast the habitational deposits representing the period 100 BC - AD 200 range from 1.5 feet to 6/7 feet thick. They contain *vihāras* and soak-pits made of brick.[46] The site was abandoned after *c.* AD 400, and regained its prominence under the Kalacuris.

Malhar situated in Bilaspur district in Chhattisgarh area of Madhya Pradesh was a flourishing township on the ancient route from Kauśāmbī to the south-eastern coast.[47] Baked brick structures and punch-marked coins appear in *c.* 400 BC-*c.* AD 200. Semiprecious stone beads and terracotta objects also occur. Structures in *c.* AD 300-600 were built of baked bricks and brickbats.[48] Stone structures are found, and an inscribed terracotta sealing of the second century occurs.[49] Although two other periods, *c.* seventh-ninth century and ninth-thirteenth century, are mentioned,[50] nothing particular is stated about them. It is evident that Malhar suffered a sharp decline after the Gupta period.

Tumain (Tāmbavana) in Guna district in Madhya Pradesh was habited from the fifth century BC to the twelfth century AD. It seems to have been in a good shape till the fifth century AD. Houses of baked bricks appear between the second century BC and the first century AD and even earlier.[51] Ring wells are also found. Skin rubbers, other terracotta objects, glass beads, punch-marked coins and inscribed tribal copper coins,[52] all suggest urbanism, which continued in the period from the first century to the fifth century AD. This period shows beads and bangles of glass together with bangles of shell and copper.[53] Pottery includes red polished ware and stamped pots. Iron objects comprising knives and sickles, copper miniature bulls, and stone images are also found.[54] No coins are reported, but an inscribed clay sealing of the fifth century appears.[55] Iron, glass and terracotta objects occur in the sixth to the twelfth century AD,[56] but we are not

[40] *IAR, 1965-66*, p. 22. [41] *IAR, 1966-67*, p. 18.
[42] *IAR, 1965-66*, p. 22; *1966-67*, p. 18. [43] *IAR, 1966-67*, p. 18. [44] Ibid.
[45] M.G. Dikshit, *Tripuri—1952*, pp. 13, 18, 29. [46] Ibid., p. 18.
[47] *IAR, 1974-75*, p. 21. [48] *IAR, 1975-76*, p. 23. [49] Ibid.
[50] *IAR, 1974-75*, p. 23. [51] *IAR, 1971-72*, p. 28. [52] Ibid. [53] Ibid.
[54] *IAR, 1971-72*, p. 28; *1972-73*, p. 16. [55] *IAR, 1972-73*, p. 16.
[56] Ibid.

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told whether they are earlier than AD 1000. Three Buddhist stupas, which seem to have been constructed in Maurya times on the main route from Mathura to Vidisha,[57] continued in this period, but whether they existed till the twelfth century is not clear. Two small stone images of Gaṇeśa, and, more importantly, a hoard of 589 silver coins kept in a copper vessel belong to this period.[58] These coins may have been issued in the sixth-seventh centuries or in an earlier period. After the seventh century the site is noted only for the find of some rare stone sculptures of the tenth century.[59]

Eran in Sagar district in Madhya Pradesh seems to have been well settled around *c.* 300 BC, when it shows iron objects, tribal copper coins and Maurya Brāhmī writing.[60] But in the first five centuries of the Christian era it emerged as an important town. It shows three structural phases. Red polished ware, terracotta figurines, seals and beads together with beads of glass and semiprecious stones are found.[61] Numerous coins, issued in earlier times, enjoy currency during this period. It has a hoard of 3268 punch-marked coins ascribable to *c.* 200 BC.[62] Coins of the Nāgas, Western Kṣatrapas, Rāma Gupta, and the Indo-Sassanian rulers have also been recovered,[63] and a sealing inscribed in the early Gupta character occurs.[64] The site was abandoned after the fifth century AD. This was revealed by excavation in the first season[65] and confirmed by the subsequent dig, which yielded structures of a 'late phase' after a gap.[66] The excavation in the third season showed that after a lapse of time following the fifth century there began 'the late medieval period', marked by medieval coins, coins of former princely states and also by lacquer bangles.[67]

Nandur in Raisen district was located on the ancient trade route from Kauśāmbī to Nasik.[68] Inhabited since the fifth century BC, it yielded cast and punch-marked copper coins of *c.* 400-300 BC.[69] The black-and-red ware continued here till the first century AD.[70] In *c.* 200 BC-AD 100 shell and terracotta bangles, iron objects and copper coins are found.[71] Painted and stamped pottery, and some inscribed seals of Kuṣāṇa – Kṣatrapa times are attributed to *c.* first century to fourth century AD. The period from fourth to the sixth century AD shows grey ware pottery and inscribed seals. The terms *viṣaya* (district) and *mahādaṇḍanāyaka*[72] (chief magistrate) mentioned in the seals may suggest that Nandur or Nandipura formed the headquarters of a district. More or less similar seals have been found at

[57] *IAR, 1971-72*, p. 28. [58] *IAR, 1972-73*, p. 16. [59] *IAR, 1971-72*, pp. 27-28.
[60] *IAR, 1960-61*, p. 18. [61] Ibid.
[62] *IAR, 1961-62*, p. 23; *1962-63*, p. 12. [63] Ibid. [64] Ibid.
[65] *IAR, 1960-61*, p. 18. [66] *IAR, 1961-62*, p. 25. [67] *IAR, 1962-63*, p. 12.
[68] *IAR, 1980-81*, p. 37. [69] Ibid. [70] Ibid. [71] Ibid.
[72] Ibid.

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Gupta sites in Bhita and Vaishali. The Gupta phase also showed brick walls and a drainage system with earthen conduits. But the top layer yielded a rubble masonry wall and some coins of the 'Muslim' period.[73] The report states: "During the horizontal dig all the structural deposits of NDR III, i.e., Muslim, Gupta and Kṣatrapa were noticed."[74] This statement contradicts the conclusion that the excavation showed the Gupta period, early medieval period and the 'Muslim' period.[75] No antiquities whatsoever have been attributed to the early medieval period. On the present showing in the early medieval period Nandur seems to have been deserted.

Maheshwar, identified with Mahiṣmatī, is situated on the northern bank of the Narmada, and Navdatoli (literally the village of boatmen) on its southern bank; they face each other. They belong to West Nimar district in Madhya Pradesh.[76] Like Kayatha, they are famous chalcolithic sites. The historical period began at these places around *c.* 400 BC with settlements after a gap of about one thousand years. Navdatoli had a stupa with some of its bricks inscribed in the characters of the third century BC.[77] It also yielded early coins. Ring wells were found, and the pottery consisted of black-and-red and NBP wares.

The period 100 BC-AD 100, limited to Maheshwar, showed glass objects, tiles and burnished ware.[78] The last period of settlement started around AD 100 and probably ended around AD 400. Its structures were made of kiln-burnt bricks, and the ruins of a large room with verandas were exposed. Red polished ware and a sprinkler were found. All these remains are ascribed to the Kṣatrapa period.[79] Many terracotta objects including moulds and crucibles have been found at the two sites.[80] Though glass was known to the Maheshwar people earlier, ninety-five per cent of glass bangles belong to *c.* AD 100-400.[81] The urban importance of Maheshwar is indicated by many coins including punch-marked, tribal and Ujjayini.[82] It is apparent that the site was abandoned after the fourth century AD. The last period of occupation is dated to 'late medieval times' when this part of the country passed under the control of the Muslims followed by the Marathas.[83]

[73] *IAR, 1982-83*, p. 40. [74] Ibid. [75] Ibid.

[76] H.D. Sankalia, B. Subbarao and S.B. Deo. *The Excavations at Maheshwar;* Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, p. 72.

[77] Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt.I, p. 73.

[78] Ibid. [79] Ibid.

[80] H.D. Sankalia, B. Subbarao and S.B. Deo, *The Excavations at Maheshwar and Navdatoli, 1952-53*, p. 191.

[81] Ibid., p. 216. [82] Ibid.

[83] Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, p. 73.

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Awra located in Mandasor district in the Malwa region of Madhya Pradesh seems to have entered the historical phase in the fourth century BC.[84] Mound 2 shows semiprecious stones, terracotta objects and six NBP pieces. Bangles of conch-shell appear. Structural remains include a rubble wall, an oven of brick and also a square storage tank of the same material.[85] Occupation in Mound 2 ended in the beginning of the Christian era.

Excavation in Mound 3 proved to be more important, and we find here clear signs of urbanism in the post-Maurya phase, which shows a small mother goddess in ivory and the first iron objects along with a piece of NBP ware in the top layer.[86] We also notice a mud residential house. Two ring wells, one of them joined with pottery pipes for the discharge of sullage water, were also discovered.[87] Iron objects included a chisel and a sickle. A Sātavāhana copper and a punch-marked copper coin were found. A burnt ivory sealing is credited with the characters of the third century BC.[88] Probably it could be later because of the Sātavāhana associations of the occupational layers. The same layers have also yielded a storage jar, miniature vases and terracotta objects.[89]

The post-Maurya phase in Mound 3 ended before the beginnings of the Christian era. By and large the site was deserted for a very long period till it was reoccupied in 'medieval times'.[90] The term medieval apparently indicates the advent of the Muslim rule in this area.

Sanchi is famous for its stupa set up in the third century BC. It also has one of the earliest monasteries with which urban elements were directly associated. Known as Devī Vihāra where Devī, the queen of Aśoka lived, the brick-built Buddhist monastery with its nine cells, covered nearly 11,500 sq.ft.[91] Many iron objects, stone objects, terracottas, and pieces of glazed and unglazed pottery were recovered from the eastern cells which were six in number.[92] Glazed pottery mentioned in earlier reports meant probably red polished ware, which was widely prevalent in western India, the Deccan and the adjacent areas. Objects of gold, beads of semiprecious stones and a piece of uncut lapis lazuli were also obtained.[93] More important, eight western Kṣatrapa silver coins and ancient copper coins of different periods were found.[94] All this demonstrates urban influence in the monastic area and its precincts. Western Kṣatrapa coins show that the Sanchi monastery remained in occupation until the fourth century. Since the existing report does not mention the remains beyond the fourth century, it appears that the decay of urbanism led to the desertion of the monastery.

[84] *IAR, 1959-60*, p. 24. [85] Ibid.
[86] *IAR, 1959-60*, p. 24. This relates to excavation in Mound 3. [87] Ibid., p. 24.
[88] Ibid. A round terracotta seal with the same characters has been found in Mound 2.
[89] Ibid., p. 25. [90] Ibid. [91] *ASR, 1936-37*, pp. 85-87. [92] Ibid., p. 87.
[93] Ibid. [94] Ibid., p. 85.

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Besnagar in Vidisha district in the Malwa region of Madhya Pradesh is almost identical with the ancient city of Vidisha. But the diggings carried on so far do not tell much about it. Of the three places excavated in the site, stratigraphic sequence is available only for BSN I. The users of the black-and-red ware were the first settlers. The NBP phase shows ring wells, a baked brick wall, terracotta flesh rubbers, copper and iron objects and punch-marked coins.[95] This period may have ended around 200 BC. The succeeding period called the Śuṅga is marked by the kaolin ware, marble objects, shell bangles, punch-marked coins and an inscribed stone seal.[96] No structures are mentioned. The same is the case with the Nâga-Kuṣāṇa period, which shows sprinklers, votive tanks, terracotta gamesmen and flesh rubber and a few copper coins.[97] Red ware with painting, terracotta objects, a silver coin, brick pavement and other antiquities appear in the Gupta period.[98] The post-Gupta phase has pottery and some terracotta objects;[99] otherwise there is not much information about it. Apparently habitation declined sharply. In BSN II huge temple remains have been exposed, but they have not been dated.[100]

Kayatha in Ujjain district in Madhya Pradesh lies about twenty-four km east of Ujjain on the Ujjain-Maski road. It is famous for its chalcolithic culture. Habitation began after an interval of about seven centuries and continued till Gupta times. Ivory figures of mother goddesses, semiprecious stones, terracotta figurines, iron objects and NBP Ware[101] inaugurated the historical period. Typical Śuṅga terracottas and cast copper coins appeared later.[102] In the Śuṅga-Kuṣāṇa-Gupta period (*c.* 200 BC - *c.* AD 600), terracotta discs, lamps, votive tanks, flesh rubbers and also a crucible, querns, rubber stone, etc., are found.[103] One huge brick structure, which has several rooms, walls and a platform, probably belongs to the Kuṣāṇa period.[104] We also notice a bathroom with arrangements for draining out water.[105]

A carved ivory bottle and a few cast coins occur. The excavators state that the site may have been occupied till the Muslim invasion,[106] but do not assign any excavated material to the post-Gupta phase. The Gupta period possibly shows the remains of a kitchen with a hearth and a Buddha figure in the Gupta style.[107] Some sculptured fragments and 'medieval' temple remains, 'scattered in the village', are associated with the post-Gupta phase.[108] Apparently these stray surface finds in the neighbourhood of the site do not prove its continuous occupation in early medieval times.

[95] *IAR, 1963-64*, pp. 16-17. [96] Ibid. [97] Ibid., p. 17. [98] Ibid.
[99] Ibid. [100] Ibid. [101] *IAR, 1964-65*, pp. 18-19. [102] Ibid.
[103] Z.D. Ansari and M.K. Dhavalikar, *Excavations at Kayatha*, p. 8. [104] Ibid., pp. 14-15.
[105] *IAR, 1964-65*, p. 19. [106] Ibid. [107] Ibid.
[108] *IAR, 1967-68*, p. 25.

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Even the Gupta remains are poor, and the site was practically discarded in post-Gupta times.

Although Ujjain, the most important town in Malwa, was settled since 700 BC,[109] it suffered decay after the Gupta age. The fortified settlement of the NBP phase yielded numerous iron objects, a blacksmith's furnace, semiprecious stones, glass beads, ivory objects and terracotta flesh rubbers.[110] However ivory objects appear in large numbers probably after the third century BC. An ivory seal with the Ujjain symbol bears an inscription of the third-second century BC.[111]

Period III is credited by the excavator with a long life from *c.* 200 BC to *c.* AD 1300. Although the preceding period (*c.* 500 BC-*c.* 200 BC) with an occupational deposit of fourteen feet is assigned three hundred years, Period III with an occupational deposit of only nine feet is assigned eleven hundred years.[112] The contrast clearly suggests less of habitation in a good part of Period III. The antiquities ascribed to the period as a whole really seem to belong to the early Christian centuries. They comprise brick structures, brick drains for sanitary arrangements, and a multiple oven capable of taking many vessels for mass cooking.[113] Terracotta ring wells are very common. Terracotta votive tanks, human and animal figurines, ivory hairpins and combs, bangles of shell glass and terracotta[114] — all these may belong to the early Christian centuries. Numerous coins are attributed to Period III but not specified century-wise or dynasty-wise. A terracotta coin mould showing the effigy of the Roman emperor Augustus Hadrianus (AD 117-38)[115] is a good indicator of the date. An inscribed casket lid and an inscribed seal, both of the first century AD, are found.[116] None of the two consecutive *IAR* reports (*1956-57, 1957-58*) specifies any antiquities of post-Gupta or Paramāra times, and suggests that Ujjain declined after Gupta times (Fig. 16). Hsüan Tsang does not say anything specific about the city of Ujjain. Speaking of the country of Ujjayinī he states that the population is congested and the establishments wealthy.[117] But he found the Buddhist convents mostly in ruins; only three or five were preserved and there were only some three hundred priests. However several tens of brahmanical temples were occupied by sectaries of various types.[118]

Dangwada in Ujjain district located on the Chambal river assumed importance in the Śuṅga-Kuṣāṇa period, which shows a temple structural complex. Numerous objects such as ivory, silver-coated bangles, a small gold leaf, decorated handle of a vase in kaolin, semiprecious stones and large number of punch-marked coins[119] indicate an urban set-up. Apart

[109] *IAR, 1957-58*, p. 34. [110] Ibid., p. 36. [111] Ibid.
[112] *IAR, 1956-57*, pp. 24,27. [113] Ibid., p. 27. [114] *IAR, 1957-58*, p. 36.
[115] Ibid. [116] Ibid. [117] *Si-Yu-Ki*, II, p. 270. [118] Ibid.
[119] *IAR, 1979-80*, pp. 54-55.

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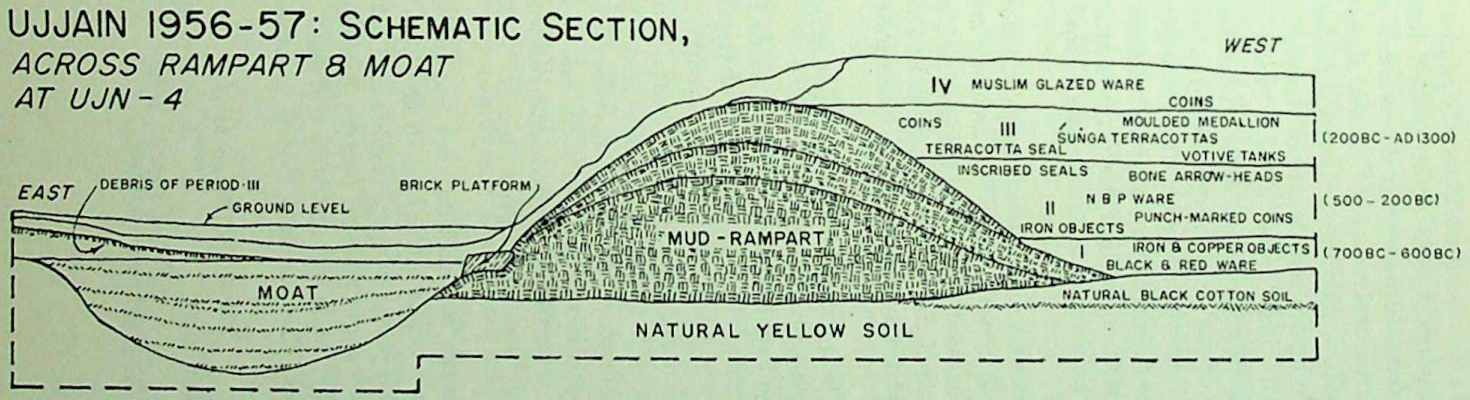


FIG. 16. Ujjain 1956-57 schematic section across Rampart and Moat at UJN-4 after *IAR, 1956-57*, fig. 10.

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from the remains of a Śiva temple and sacrificial place, Ujjayini coins, cast copper coins and inscribed seals are reported from the post-Maurya period.[120] The Kṣatrapa-Gupta period shows a few inscribed seals, a terracotta mould and structural remains;[121] it also shows Kṣatrapa coins.[122]

The period that follows the Gupta-Kṣatrapa period is obviously that of decline. Only some religious seals made of terracotta and some religious images are reported. There seems to be a break which is followed by Pratīhāra and Paramāra 'pottery' and stone sculptures.[123] No structures or finds indicating any urban set-up are reported. The top layers gave pottery of the Paramāra period in five trenches, and below that painted red ware with an occasional find of 'fine Red and Kaolin ware'.[124] Since fine red ware did not continue beyond the sixth century or so, this would suggest a break in habitation in Dangwada before the advent of the Paramāras.

Sondhi lies near Mandasor, which was known as Daśapur, a prosperous town in the fifth-sixth centuries AD.[125] Mandasor attracted silk weavers from Gujarat. Trial excavations at Sondhi revealed some structures and sculptures of late Gupta times.[126] Nothing is known about later ages, which suggests that Mandasor was probably abandoned in early medieval times.

The case of Nagda in the same district does not deserve much attention because it was deserted around 200 BC.[127]

A trial excavation at Pagara in Dhar district shows habitation from the first to the twelfth century AD.[128] The period from the first to the third century AD has plenty of red ware marked by sprinklers;[129] that from the fourth to the sixth century shows a gold piece, and terracotta objects including flesh rubbers.[130] Gupta gold coins and Kṣatrapa silver coins were picked up in explorations.[131] Pagara therefore may have been a town during the first six centuries of the Christian era. Fewer antiquities are reported between the seventh and twelfth centuries which show generally grey ware besides some iron and copper objects.[132] Apparently the post-Gupta phase was poor.

Runija in Ujjain district yielded iron, cast and punch-marked coins, a glass bangle and ivory beads attributed to the pre-Śuṅga-Sātavāhana phase.[133] But about this phase nothing remarkable is known. A Kṣatrapa coin of Rudrasena and some painted pottery belongs to the Kṣatrapa-Kuṣāṇa period. Its other finds include ivory and shell bangles, and beads of semiprecious stones. The Gupta period is represented by terracotta

[120] *IAR, 1982-83*, p. 60. [121] *IAR, 1979-80*, pp. 54-55. [122] *IAR, 1982-83*, p. 60.
[123] Ibid. [124] Ibid., p. 59. [125] *AI*, no.9, p. 161. [126] Ibid.
[127] *IAR, 1955-56*, p. 19 [128] *IAR, 1980-81*, p. 32. [129] Ibid., p. 33.
[130] Ibid. [131] Ibid., p. 32. [132] Ibid., p. 33 [133] Ibid., p. 39.

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figurines, gold coins and beads of semiprecious stones.[134] No structures are reported from any phase. Apparently the site was deserted after the Gupta period.

Although Gujarat is known for commerce in historical times because of its coastline, the excavated sites do not provide much evidence about the continuity of commerce in early medieval times. Broach or Bharuch, identical with the ancient port of Bharukaccha mentioned in the Pāli texts, is an important example. Settlement started here in the beginning of the third century BC[135] or a little later. The town seems to have a mud rampart with a deep ditch on the outer side. Its earliest finds include terracotta objects, semiprecious stones, and glass bangles,[136] and the place was distinguished by its thriving bead industry.[137] Brick structures are attributed to the third-seventh/eighth centuries AD, which also show terracotta flesh rubbers and decorated metal objects. Lead coins (possibly Sātavāhana) and Kṣatrapa copper coins of the third century are found.[138] Stone images of the sixth-seventh centuries seem to be the last important find of the period.[139] After the seventh century there is a clear break.[140] The 'medieval' period was marked by coins and glazed pottery.[141] Obviously the medieval here refers to the period after the twelfth century. The account of Hsüan Tsang also suggests decline in the capital of the kingdom of Bharukaccha. He states that the city is twenty *li* or four miles round, although the usual area of a city given by him is thirty *li*.[142] He adds that there are some ten monasteries (*saṃghārāmas*) with about three hundred priests.[143] This statement may pertain to the city.

Located on the bank of the Tapti in Surat district, Dhatva's historical phase is assigned to *c.* 500 BC to *c.* AD 200,[144] though the finds suggest a later beginning. The excavation yielded red polished ware, and the Roman amphorae were obtained from the surface. Semiprecious stones and punch-marked coins were found. Its most distinguishing feature was the iron smelting industry.[145] It is called a village settlement,[146] probably because of its size but the finds associated with it lend it some urban colour. After *c.* AD 200 the settlement was deserted for long.[147]

Saurashtra or the Kathiawar zone had come into historical limelight in the time of Aśoka. But it continued to be important in later times too. Valabhi in Bhavnagar district was the capital of the Maitrakas and also a great centre of learning like Nalanda. Signs of settlement start here in the first century AD, but no structures appear till the fourth century. However

[134] Ibid. [135] *IAR, 1959-60*, p. 19. [136] Ibid. [137] Ibid.
[138] Ibid. [139] Ibid. [140] Ibid. [141] Ibid.
[142] *Si-Yu-Ki*, II, p. 259. [143] Ibid., 260. [144] *IAR, 1967-68*, p. 20.
[145] Ibid. [146] R.N. Mehta and S.N. Chowdhary, *Excavation at Dhatva*, p. 9.
[147] *IAR, 1967-68*, p. 20.

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amphorae, red polished ware and votive tanks occur.[148] While amphorae and red polished ware continue in the fourth-fifth centuries, brick structures also appear. Traces of furnaces probably meant for smelting are also visible.[149] The period from the fifth to the eighth century shows some floors made of reused bricks. It has however a gold ring possibly imported from the Roman world. Although it was the seat of the Maitraka power the excavated area does not suggest much urban prosperity for Valabhi.

At Amreli in the Kathiawad peninsula the entire occupation of deposit dates from the first century BC to the fourth century AD. The red polished ware resembling the Samian ware is found throughout this period. Besides terracotta figurines and sealings, dated Kṣatrapa coins appear.[150] Amreli may have been a townlet in ancient times.

Karvan in district Vadodara or Baroda is the modern name of ancient Kāyāvarohaṇa. Habitated between the second and the eighth centuries AD,[151] it showed four phases of structure.[152] In the earlier phase a brick-laid central quadrangle with drains and soakage-jars was exposed.[153] Moulded bricks were used.[154] Although the red polished ware was not so common, sprinklers were found in different excavations.[155] Apart from iron and copper objects, tribal coins, and copper coins of the Kṣatrapa and Maitraka periods were found.[156] Lead coins also occur.[157] A terracotta inscribed seal of about the seventh century was unearthed.[158] Of course the usual terracotta human and animal figurines and semiprecious stone beads were encountered.[159] A gold bead was also discovered.[160] Reused bricks marked the last phase of habitation.[161] It looks as if the period came to an end around the seventh-eighth century, and then 'medieval times' began,[162] but exactly when we do not know. The only datable material found is an inscription of the twelfth century;[163] the typical glazed ware indicates a similar date. No structure occurs in 'medieval times', but numerous bricks and brickbats were recovered from the debris.[164] All this suggests a kind of break in occupation. The site came to be reinhabited around the twelfth century.

Not far away from the seacoast, Nagara in Kaira district is situated in the taluqa of Cambay, three km to the north of Cambay. Although the site was inhabited around the fifth century BC, in the early centuries of the Christian era it became a large town due to commerce. It imported objects from

[148] *IAR, 1979-80*, p. 24. [149] Ibid. [150] *AI*, no.9, p. 162.
[151] *IAR, 1975-76*, p. 15. [152] *IAR, 1974-75*, p. 15. [153] Ibid. [154] Ibid.
[155] *IAR, 1974-75*, p. 15; *1976-77*, p. 18; *1977-78*, p. 22.
[156] *IAR, 1974-75*, p. 16; *1975-76*, p. 15. [157] *IAR, 1976-77*, p. 18.
[158] *IAR, 1975-76*, p. 15. [159] *IAR, 1977-78*, p. 22. [160] *IAR, 1974-75*, p. 16.
[161] Ibid., p. 15. [162] *IAR, 1977-78*, p. 22. [163] Ibid., p. 23.
[164] Ibid., p. 22.

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the Roman world and Central Asia.[165] Excellent objects of chank and ivory have been found.[166] Besides brick buildings numerous channel hearths have also been recovered.[167] The pottery comprises the red polished ware, Roman amphorae and burnished ware.[168] Terracotta seals and potsherds bearing the Brāhmī script occur.[169] Terracotta human and animal figurines are found.[170] In addition to iron objects, we find lead, copper and silver coins.[171] Coins of the Kṣatrapa dynasty range from the first to the fifth century AD.[172] Although habitation is said to have continued up to the ninth century,[173] the reported finds[174] from the town are typical of pre-Gupta and Gupta times. The prosperity of the town, which was large and active in the early Christian centuries, began to fade away. The habitation shrank and large parts of the town were given up. All the trenches show a distinct gap in occupation till the fourteenth century[175] (Fig. 17).

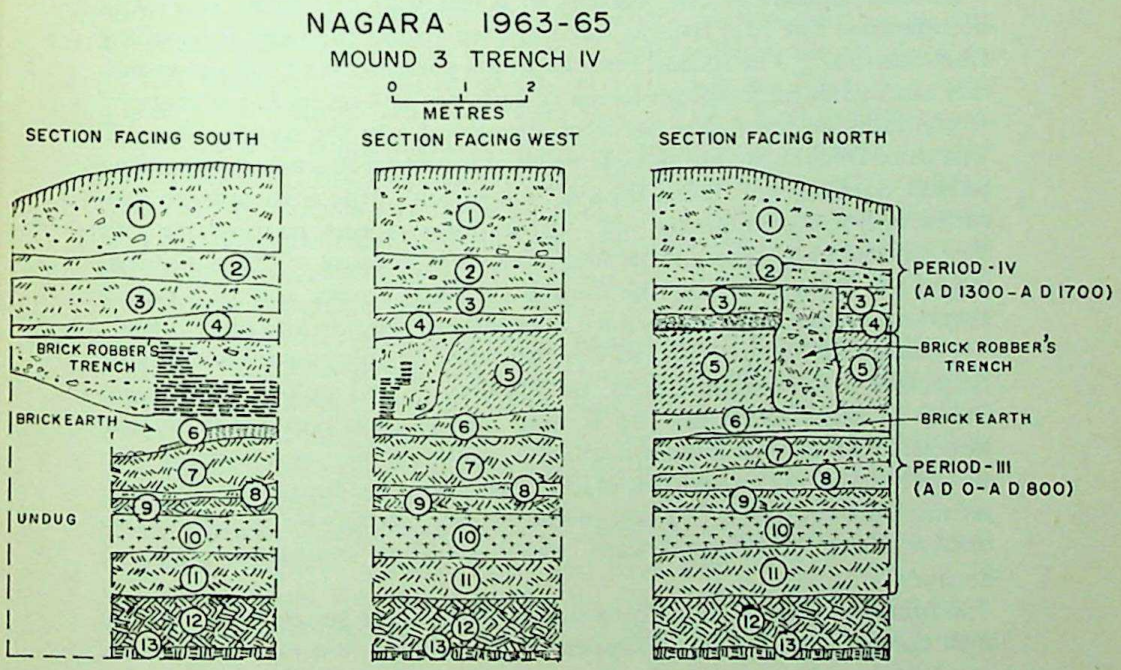


FIG. 17. Nagara 1963-65 Mound 3 Trench IV after R.N. Mehta and D.R. Shah, *Excavation at Nagara*, Baroda, 1968, fig. 3.

[165] *IAR, 1964-65*, p. 12. [166] R.N. Mehta and D.R. Shah, *Excavation at Nagara*, p. 9.
[167] Ibid. [168] *IAR, 1964-65*, p. 11. [169] *IAR, 1963-64*, p. 10.
[170] *IAR, 1964-65*, p. 11. [171] Ibid.
[172] R.N. Mehta and D.R. Shah, *Excavation at Nagara*, pp. 18-19.
[173] *IAR, 1964-65*, p. 11. [174] R.N. Mehta and D.R. Shah, *Excavation at Nagara*, p. 9.
[175] Ibid.

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Prabhaspatan in Junagadh district in Kathiawad is an important site, which was dug for several seasons.[176] Its historical phase started around 400 BC with stone fortification.[177] Around 200 BC we find an inscribed flesh rubber.[178] The NBP Ware found at Prabhaspatan could not be earlier than this date. Ivory points and hairpins occur, besides terracotta gamesmen, and a plate as well as a bead of gold. All these could be assigned to a period from the first century BC to the sixth century AD during which red polished ware, fine moulded terracotta human and animal figurines, and carved shell bangles occur. A fragment of amphorae shows Roman contact. The site is important for the find of two thousand Gupta and Valabhi coins of copper and silver.[179] After the sixth century AD it was abandoned, except that one of the mounds was reutilized in medieval times for the construction of a temple.[180]

Dwarka situated on the seacoast in Kathiawad had three successive occupations. The first Dwarka was founded round the beginning of the Christian era.[181] The second Dwarka shows a momentous change in pottery marked by fragments of Roman amphorae and red polished ware.[182] It was founded some time between the second and the sixth century.[183] The third Dwarka did not possess much of an urban character. According to H.D. Sankalia the 'Third Dwarka' was set up in the fifth-seventh centuries, and it was connected with Viṣṇu's incarnations, particularly with the activities of Śrīkṛṣṇa. It became prominent because of the popularizing of the Purāṇas under the Guptas.[184] Thus Gupta and post-Gupta Dwarka assumed more importance as a centre of religion and pilgrimage.

Vadnagar in Mehsana district was also called Vṛddhanagara in the past. It became a flourishing city in AD 200-600.[185] Red polished ware was found in large quantities. Its Roman affinity was confirmed by the associated find of an imitation intaglio in clay depicting a woman with flower in hand. A clay seal found in the same context bears writing of the second-third centuries.[186] The topmost levels (*c.* AD 600-1000) shows a distinctive coarse red-slipped ware, which seems to indicate a phase of decline.[187]

Maharashtra had a good many towns, which were generally associated with the Sātavāhanas but disappeared afterwards. We may begin with north Maharashtra. Arni located on the bank of the Arunavati in Yavatmal

[176] *IAR, 1955-56*, pp. 7-8; *1956-57*, pp. 16-17; *1971-72*, pp. 12-13; *1975-76*, p. 13; *1976-77*, pp. 17-18.

[177] *IAR, 1971-72*, p. 13. [178] *IAR, 1956-57*, p. 7. [179] *IAR, 1955-56*, p. 7.

[180] *IAR, 1956-57*, p. 17.

[181] H.D. Sankalia in Z.D. Ansari and M.S. Mate, *Excavations at Dwarka*, p. 13.

[182] Ibid., p. 15. [183] Ibid. [184] Ibid., p. 16. [185] *IAR, 1953-54*, p. 10.

[186] Ibid. [187] Ibid.

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district, not far away from Nagpur, is an important site. Settlement began here with the megalithic phase and continued through the Maurya period to the post-Maurya-Sātavāhana period.[188] The last subperiod of occupation had massive baked brick structures in three phases. Black-and-red, NBP and red polished wares were found. Rouletted and kaolin wares were also discovered. Beads of semiprecious stones along with pearls and gold were found, and glass bangles were recovered. Besides iron objects, copper and lead coins were unearthed. One coin carries the name of the Sātavāhana king Śātakarṇi.[189] Terracotta sealings have also been found. In historical times it was a major Sātavāhana culture site, which was deserted after the third century AD.

Paunar in Wardha district is considered to be the capital of the Vākāṭakas,[190] but its prosperity roughly began in late Sātavāhana times and grew under the Vākāṭakas and Viṣṇukuṇḍins.[191] Brick structures, tiles for roofing, and ring wells for soakage were found. Well-built houses with excellent foundations were exposed.[192] Besides black-and-red ware the red polished ware and the amphorae were also noticed.[193] Kṣatrapa, early Kalacuri and Viṣṇukuṇḍin coins were found.[194] Rice-husk impressions on tiles and pottery fragments are taken to mean that Paunar was occupied by agriculturists,[195] but this might suggest close agricultural surroundings. The site remained unoccupied for about three centuries after the sixth century. The latest layers are exceptionally disturbed.[196] But the find of the Chinese celadon ware, and that of the glazed ware,[197] indicates that it was reoccupied around the tenth century or later.

Kaundanpur in Amraoti district is identical with Kauṇḍinyapura, the capital of Vidarbha mentioned in the epics. It is located on the bank of the Wardha. A small-scale excavation showed that its historical period began with the NBP sherds and punch-marked coins.[198] These could be ascribed to *c.* 300 BC or to a later date. The Sātavāhana phase commenced around *c.* 100 BC. We find an inscribed clay sealing of about the first century AD. It also shows a sherd of the russet-coated painted ware and a brick construction. Legged querns were also recovered.[199] In addition to Sātavāhana coins, specialized beads were found. But deterioration set in the late Sātavāhana phase, after *c.* 200 AD, and this was followed by a long

[188] *IAR, 1978-79*, p. 71. [189] Ibid.

[190] *IAR, 1966-67*, p. 27. It is not clear whether Paunar represents Pravarapura, the Vākāṭaka capital. S.B. Deo and M.K. Dhavalikar, *Paunar Excavation (1967)*, pp. 114-15.

[191] S.B. Deo and M.K. Dhavalikar, *Paunar Excavation (1967)*, pp. 9, 115.

[192] Ibid. pp. 7, 9, 115. [193] *IAR, 1966-67*, p. 27.

[194] S.B. Deo and M.K. Dhavalikar, *Paunar Excavation (1967)*, pp. 11-12.

[195] Ibid., p. 10. [196] S.B. Deo and M.K. Dhavalikar, *Paunar Excavation (1967)*, p. 7.

[197] *IAR, 1966-67*, p. 27. [198] *IAR, 1961-62*, p. 29. [199] Ibid., p. 30.

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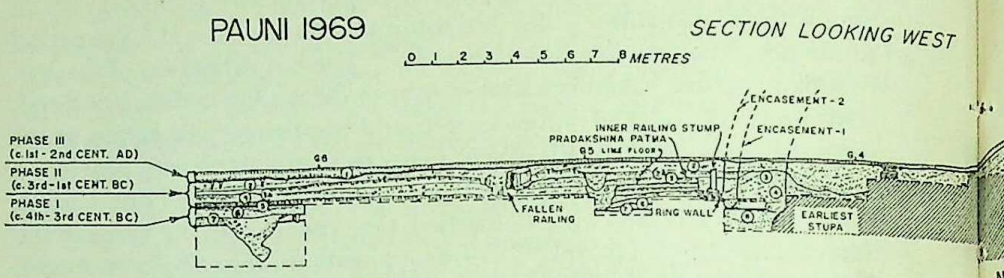


FIG. 18. Pauni 1969 section looking west after S.B. Deo and

break.[200] In the 'later medieval age' large buildings appeared.[201] This is called the 'Muslim' period (1300-1600).[202]

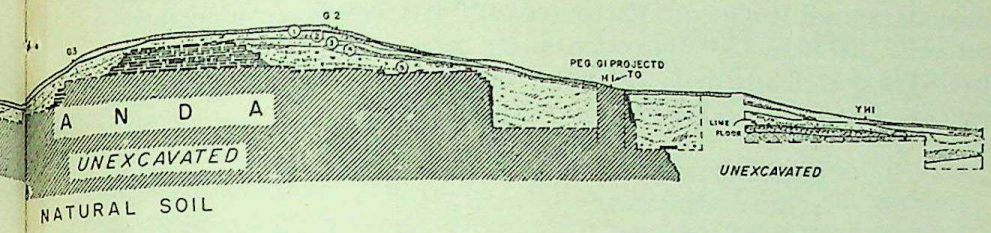
Pauni in Bhandara district is famous mainly for its stupa remains belonging to Sātavāhana times.[203] Some stupas have diameters well over forty metres. The 'magestic' structures, which lasted from the fourth/third century BC to the second/third century AD, subsisted mainly on the donations of traders (who bore the title 'gupta'), artisans and householders.[204] Records do not mention any donor from the rural or official class. This would mean that some urban centre in the vicinity of the stupa supported this 'centre of Hīnayana Buddhism'.[205] Sātavāhana and Kṣatrapa coins[206] may indicate cash donations. Apparently the site was abandoned after the second century AD[207] (Fig. 18).

Bhokardan or ancient Bhogavardhana in Aurangabad district sank into insignificance towards the end of the third century. Settlement started here in pre-Sātavāhana times, when we find mud walls, black-and-red ware and punch-marked coins.[208] The Sātavāhana strata are known for rich materials. Five structural phases with typical Sātavāhana tiles were exposed. Pottery included black-and-red ware,[209] and red polished ware. The rich repertoire of small finds show the town to be a centre of bead making and shell cutting.[210] They used the grinding mill which shows Roman inspiration.[211] Its Roman connection is demonstrated by the

[200] M.G. Dikshit, *Excavations at Kaundinyapura*, p. 27.
[201] *IAR, 1961-62*, p. 30.
[202] M.G. Dikshit, op. cit., p. 29.
[203] *IAR, 1969-70*, p. 21.
[204] S.B. Deo and J.P. Joshi, *Pauni Excavations (1969-70)*; p. 117.
[205] Ibid.
[206] Ibid., pp. 96-101.
[207] *IAR, 1969-70*, p. 21.
[208] *IAR, 1972-73*, p. 20.
[209] Ibid. Perforated tiles covered roofs in Nasik, Nevasa, Karad, Paithan and Ter. S.B. Deo and R.S. Gupte, *Excavations at Bhokardan (Bhoqavardhana), 1973*, p. 211.
[210] S.H. Ritti, ed., *A Decade of Archaeological Studies in South India*, p. 29.
[211] S.B. Deo and R.S. Gupte, *Excavations at Bhokardan*, p. 212.

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J.P. Joshi, *Pauni Excavation (1969-70)*, Nagpur, 1972, fig. 4.

sherds of amphorae and Megarian ware.[212] Bullae, which mostly carry the portraits of the Roman emperors Augustus and Tiberius, are found in good numbers.[213]

An ivory figure is a notable find;[214] ivory women figurines in late Sātavāhana levels remind us of the Pompeii ivory, and in execution the present figure excels the surface specimen from Ter or Tagar in Osmanabad district.[215] The site abounds in Sātavāhana and Kṣatrapa coins.[216] Four hundred coins of copper, potin and lead were unearthed. Coin moulds found here[217] show that it was a mint town. Terracotta objects including votive tanks have been found.[218] No other site in the Deccan has so many votive tanks with such a variety of shapes and models. A large number of glass enamelled terracotta crucibles suggests their use for melting different metals including gold.[219] The glass goods show technological excellence, and ivory objects, finished and unfinished, are so abundant that the place appears to be a centre of ivory carving.[220] Evidently Bhokardan was a nodal point for trade and centre of handicrafts during the Sātavāhana period. Located on the caravan route connecting Ter, Paithan and Ujjain, it was probably linked with Junnar, Karle, Kanheri and Kalyan.[221] The fall of the Sātavāhanas of Paithan is given as a cause of the fall of Bhokardan.[222]

Although brahmanical caves appear at Bhokardan in the Gupta and post-Gupta periods,[223] excavations show that after the third century AD the place was reoccupied in the 'medieval period', [224] after the tenth

[212] *IAR, 1972-73*, p. 21; *1973-74*, p. 20.
[213] S.B. Deo and R.S. Gupte, *Excavations at Bhokardan*, p. 213.
[214] *IAR, 1973-74*, p. 20. [215] *IAR, 1972-73*, p. 21. [216] *IAR, 1973-74*, p. 20.
[217] *IAR, 1972-73*, p. 21. [218] Ibid.
[219] S. B. Deo and R.S. Gupte, *Excavations at Bhokardan*, pp. 214-15.
[220] Ibid., p. 215. [221] Ibid., p. 211. [222] Ibid., p. 216. [223] Ibid., p. 215.
[224] *IAR, 1972-73*, p. 21.

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century AD or so. This can be inferred from the finds of the Chinese celadon ware, Muslim glazed ware and polychrome bangles.[225] Digging in some mounds exposed Muslim and Maratha coins.[226] It is therefore evident that between *c.* 300 and *c.* 1200 Bhokardan did not have any habitation (Fig. 19). Its decline is attributed to the fall of the Sātavāhanas of Paithan,[227] but it seems to be intimately connected with fall in trade.

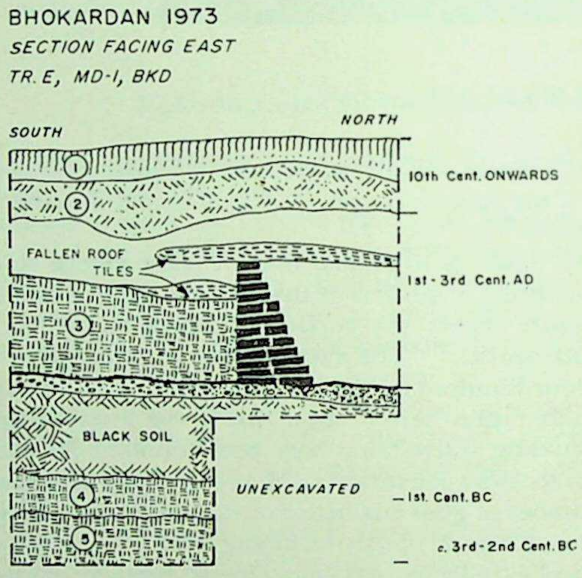


FIG. 19. Bhokardan 1973 section facing east TR.E, MD-1, BKD after S.B. Deo and R.S. Gupte, *Excavations at Bhokardan (Bhogavardhana) 1973*, Nagpur, 1974, fig. 3.

Bahal in East Khandesh district belongs to north-western Maharashtra, which seems to have been fairly settled in the historical period. Bahal had a chalcolithic phase; after a break iron appeared in *c.* 600 BC. With the presence of the NBP Ware around 300 BC the historical period began. Black-and-red ware continued in the Sātavāhana phase, and red polished ware came into use. Structural relics were poor, but two holed tiles were found. Beads of semiprecious stones were noticed. Silver punch-marked coins[228] found on the surface number 685 and belong to *c.* 300 BC - *c.* AD 100. Settlement ended in the second century AD, and then the site was affected by severe floods. After a long interruption of twelve hundred years it was reoccupied

[225] *IAR, 1973-74*, p. 20. [226] Ibid.

[227] S.B. Deo and R.S. Gupte, *Excavations at Bhokardan*, p. 216.

[228] *IAR, 1956-57*, pp. 17-18; *AI* no. 9, p. 162.

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in Yādava and Muslim times (AD 1300-1700). This is indicated by the Chinese celadon ware, the polychrome Bahmani bangles and the Mughal glazed ware.[229]

Nasik (ancient Nāsikya) is located on the southern bank of the Godavari, and is the headquarters of the district of the same name. Originally a chalcolithic site, after a long gap it entered the historical phase in *c.* 400-200 BC with mud walls, soak-pits lined with bricks, beads of terracotta and semi-precious stones, bangles, iron implements, and various types of pots in black-and-red ware.[230] Between *c.* 200 BC and *c.* AD 200 we find some uninscribed cast copper coins. A few sherds with criss-cross designs typical of the 'Andhra' ware were also found.[231] Some sherds carried Brāhmī characters of the third to the first centuries BC. Between AD 50 to 200, when the Kṣaharātas, i.e. the family of Nahapāna, ruled over this part of the country, houses were built with kiln-burnt bricks and roofed with well-made terracotta tiles. Beads of bone, glass and gold were used.[232] Nasik's Roman contact is indicated by sherds of Samian ware and bowls and sprinklers of red polished ware.[233] No excavated material after AD 200 is reported. The settlement may have continued till *c.* AD 300, which is the terminal point for the excavation and inscribing of some rock-cut caves in the neighbourhood of Nasik.[234] After that the site seems to have been reoccupied only in 1400.[235] 'Early Muslim' occupation is attested by the finds of the Chinese celadon and the glazed ware.[236]

The history of Brahmapuri in Kolhapur district goes back to *c.* 200 BC, as indicated by the presence of the NBP Ware. In the second century AD in the time of Gautamīputra Śātakarṇi, it was a city of well-built brick houses.[237] In the 'flourishing' city, beads, bangles and iron implements were found. Coins were also found. Brahmapuri kept up cultural and commercial connections with the Roman world. A bronze statue of Poseidon, the Roman god of sea, is a surface find, and a bronze vessel and clay bullae or lockets made in imitation of Roman prototypes have been recovered in diggings. Imported Roman objects were imitated in clay.[238] The lower Sātavāhana deposits of the early centuries of the Christian era

[229] *IAR, 1956-57*, p. 18.

[230] Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, p. 74.

[231] Ibid., p. 75.

[232] Ibid. H.D. Sankalia and S.B. Deo, *Report on the Excavations at Nasik and Jorwe, 1950-51*, p. 7.

[233] H.D. Sankalia and S.B. Deo, *Report on the Excavations at Nasik and Jorwe, 1950-51*, p. 7.

[234] Ibid., p. 74. [235] Ibid., p. 75. [236] Ibid., p. 7.

[237] H.D. Sankalia and M.G. Dikshit, *Excavations at Brahmapuri (Kolhapur) 1945-46*, p. x.

[238] Ibid.

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also show re-surfaced Roman ware, imported or imitated. There are also some pots entirely made of kaolin ware or bearing slip of the material.[239] "With possible gaps of short duration the occupation continued till the fifteenth-sixteenth centuries."[240] But these gaps are not mentioned. Brahmapuri was destroyed by fire probably in the reign of Śrī Yajña Śātakarṇi, but coins and pottery show that it was soon reoccupied. Once again it was deserted, and definite evidence for resettlement is found in the eleventh-twelfth centuries during the Śilāhāra rule round Kolhapuri.[241] Apparently the site remained in a state of decay between the fourth and the eleventh centuries.

Kausam in Aurangabad district, located near Paithan on the bank of the Godavari, seems to have been a major Sātavāhana culture site in *c.* 200 BC-*c.* AD 100. This is attested by a brick structure, fine ring wells or soak-pits, moulded figurines of kaolin, glass beads, and copper coins with elephant and Ujjain symbols. Terracotta bullae or lockets in imitation of Roman coins were recovered.[242] All these remains were found in the topmost layer,[243] which means that the site was abandoned in about the second century AD.

Excavations at Paithan, a capital of the Sātavāhanas, show good evidence of settlement in *c.* 300 BC-*c.* AD 100. Besides fragments of worn out NBP Ware, its finds included glass beads, crystal ear-reels, legged querns, a fine lion-capital in bone or ivory, and an ivory kohl stick. Kaolin figurines comprised a nude goddess. Two early Sātavāhana coins of lead contained the Gaja-Lakṣmī motif,[244] which became a common feature of the Gupta coinage. Paithan was affected by flood towards the end of the Sātavāhana period.[245] It seems to have little habitation after the third century AD. A brick temple in a ruined condition is ascribed to *c.* AD 600-800, i.e. the beginning of the Rāṣṭrakūṭa period.[246] At any rate the site was abandoned after *c.* AD 800.

Nevasa in Ahmadnagar district is located on the south bank of the Pravara. Its neolithic-chalcolithic phase was followed by a considerable gap after which the historical period started in around *c.* 300 BC and continued till *c.* AD 200.[247] It shows axes, sickles and ploughshares of iron.[248] Besides red ware, black-and-red ware was the main pottery although some NBP sherds were found.[249] Bricks for flooring and tiles for roofing were

[239] Y.D. Sharma, "Exploration of Historical Cities", *AI*, no. 9, p. 163. [240] Ibid.

[241] H.D. Sankalia and M.G. Dikshit, *Excavations at Brahmapuri (Kolhapur) 1945-46*, p. x.

[242] *IAR, 1965-66*, p. 28. [243] Ibid. [244] Ibid. [245] Ibid., pp. 28-29.

[246] Ibid., p. 29.

[247] *IAR, 1954-55*, p. 7; H.D. Sankalia, S.B. Deo and Sophia Ehrhardt, *From History to Prehistory at Nevasa (1954-56)*, p. xv.

[248] *IAR, 1954-55*, p. 7. [249] *IAR, 1954-55*, p. 7; *1955-56*, p. 10.

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used. The bead industry reached its climax, and the glass beads display the mastery of the Nevasa craftsman over glass making.[250] Thirty-six fragmentary pieces of crucibles used for melting purposes occur. They represented crucibles of different sizes for different purposes.[251] Glass beads and semiprecious stones were in vogue.[252] Numerous Sātavāhana coins of potin, lead and copper were found.[253] Nevasa is also rich in bullae and seals.[254] A brick barn, laid in a twelve feet deep pitch, yielded abundant quantities of charred grains.[255] The people ate wheat, *mung*, *bajri* with oil of Kardi seed.[256] The Indo-Roman or the late Sātavāhana phase shows red polished ware with sherds of the imported amphorae, fine, translucent, light blue glass bangles, imitation (in lead) or original coin of Tiberius (AD 14-37).[257] A few sherds in the red polished ware appeared to be definitely Samian in character. Houses were now constructed on extremely well-laid foundation.[258] Terracotta decorative masks and a few terracottas with typical head-dresses and hair-styles indicated foreign influence. Foreign influence is also attributed to a distinctive group of rotary querns with taller and heavier upper stones having two transverse slots for the insertion of a handle. This could generate more rotary motion.[259] Towards the end of the occupation we get a small kaolin head of a body, called the Smiling Boy of Nevasa.[260] Shell bangles suggest a flourishing cottage industry in this period.[261] The Indo-Roman phase may have ended by *c.* AD 200. Excavation was carried out at Ladmud mound also.[262] After a couple of centuries of the Christian era, up to the thirteenth-fourteenth centuries the Ladmud area does not seem to have been inhabited.[263]

Occupation in 'medieval' times took place after a lapse of considerable time,[264] and was marked by decline in the prosperity of Nevasa. The houses were built of undressed stones, without any foundation. The finds of polychrome glass bangles, glazed pottery and celadon ware[265] suggest that the 'medieval' period started here much after AD 1000.

Situated on the bank of the Terna, Ter in Osmanabad district is identical with the ancient city of Tagar, known for its artisans and merchants from inscriptions. It was called the largest trading emporium in the

[250] H.D. Sankalia et al., *From History to Prehistory at Nevasa (1954-56)*, p. 369.
[251] Ibid., pp. 384-85. [252] *IAR, 1954-55*, p. 7. [253] *IAR, 1956-57*, p. 11.
[254] H.D. Sankalia et al., *From History to Prehistory at Nevasa (1954-56)*, ch. 8.
[255] *IAR, 1955-56*, p. 10.
[256] H.D. Sankalia et al., *From History to Prehistory at Nevasa (1954-56)*, p. xiii.
[257] *IAR, 1954-55*, p. 7. [258] Ibid. [259] *IAR, 1955-56*, p. 11.
[260] *IAR, 1954-55*, p. 7. [261] Ibid.
[262] H.D. Sankalia et al., *From History to Prehistory at Nevasa (1954-56)*, p. xii.
[263] Ibid., p. 70. [264] *IAR, 1955-56*, p. 11.
[265] Ibid.

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south.[266] The old city extended over an area of a periphery of about 2.5 miles, now represented by some nine mounds situated on both the banks of the Terna.[267] The presence of the NBP Ware in the lower levels suggests the beginning of the historic period in *c.* 300 BC although the excavator assigns it to the fourth century BC.[268] Habitation continued till the fourth century AD. Red polished ware, terracottas mostly cast in double moulds, stone querns and mullers, iron objects including lamps, bangles of shell and glass, and copper coins[269] suggest the urban character of Ter. Ter-type lamps consisting of a pan equipped with a vertical handle are reported from Nasik, Nevasa and Rairh.[270] Many non-Indian objects such as carnelian seals, clay bullae, rouletted ware, etc., were found. Several vats for dying cloth exposed by excavation indicate trade in textiles. According to the *Periplus of the Erythraean Sea* goods were first brought to Ter and then transferred to the ports on the western coast via the route passing through Paithan.[271] Ter lay on the route which carried commodities from the eastern Deccan to Broach via Hyderabad, Paithan and Nasik. It was also connected with Kondapur, Nevasa and Nagarjunakonda.[272] A bead of lapis lazuli and objects of kaolin are found at Ter, although none of the raw materials is locally available.[273] The site was particularly rich in terracottas. Most of these were cast in double moulds, and some display high artistic skill.[274] Charred grains of rice, wheat and pulses have been recovered, but we do not hear of any storage bin.[275] Ter had both Buddhist and brahmanical associations. The stupa discovered here was built probably in the second half of the second century AD; this was also the date of the apsidal temple. Both are dated by the coins of Puḷumāvi found near them.[276] It seems that the site was abandoned after the fourth century AD.

Located in the black cotton soil area in the Tapti Valley, a transitional zone between central India and the Deccan, Prakash belongs to Dhulia district in Maharashtra.[277] The ancient site measures 1400×600 feet.[278] Originally a chalcolithic site, after a break of six centuries, it came to be inhabited by iron-using people,[279] around 600 BC. The settlement became urban before 200 BC,[280] and it shows coinage, soak-pits, personal ornaments,

[266] S.H. Ritti, ed., op. cit., p. 29.
[267] B.N. Chepekar, *Report on the Excavation at Ter (1958)*, p. 11.
[268] *IAR, 1957-58*, p. 23.
[269] Ibid., pp. 23-24.
[270] B.N. Chepekar, *Report on the Excavation at Ter (1958)*, p. vi.
[271] *IAR, 1968-69*, p. 17.
[272] B.N. Chepekar, *Report on the Excavation at Ter (1958)*, pp. vi-vii.
[273] Ibid., pp. vii, 66, 93-98.
[274] *IAR, 1957-58*, pp. 23-24.
[275] Ibid., p. 24.
[276] *IAR, 1968-69*, pp. 17-18.
[277] *AI*, nos. 20 and 21, pp. 8-9.
[278] Ibid., p. 8.
[279] Ibid., pp. 12-24.
[280] Ibid., p. 14.

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domestic equipment and sophisticated ceramic industries.[281] Urban life developed further in *c.* 150 BC-*c.* AD 600.[282] Although not much of structure is found, we have a fourteen feet thick cultural deposit.[283] More emphasis was placed on production of household goods in metal.[284] Ceramic industry declined, but bangle industry, notably of shell, became sophisticated.[285] Legged querns, similar to those found in Tripuri, Maheshwar and Nevasa, came into use.[286] Coinage suggests contact with Ujjain, and we find an established mode of trade.[287] "The available evidence indicates that as far as this settlement was concerned, towards the close of Period III (*c.* 150 BC-*c.* AD 600), the light seemed to be flickering out."[288]

Although a sixteen feet thick deposit is assigned to the period from the end of the sixth to the eleventh century its initial two feet accumulation overlaps with the earlier period.[289] As indicated by broken and reused bricks (though complete bricks also appear),[290] structures were poorer. Ceramic industry is called 'non-descript' and a coin occurs out of the chronological context.[291] But Prakash is a rare example of the continuity of considerable artisanal activities in early medieval times. Metal, particularly iron, was further put to domestic and industrial use, and metallic vessels replaced earthenware in the houses of the rich.[292] Glass industry showed the same impulse towards mass production as metal.[293] Objects of shell have been found,[294] but the shell bangle industry had ceased to be important. Possibly artisanal activities continued in an altered set-up, and artisans were attached to big households which collected rent from the countryside and paid the artisans in kind.

In Madhya Pradesh, Rajasthan and Gujarat urbanization started in *c.* 300 BC, and towns became affluent under the Sātavāhanas and Śaka Kṣatrapas. Urbanism became a spent-up force by the end of the fourth century AD, although at a couple of sites in Gujarat it continued up to the seventh-eighth centuries. The situation in Maharashtra was slightly different. In the early historic period towns appeared in this state around 200 BC or a little earlier and, except Prakash, all others disappeared in the third century AD.

[281] Ibid., pp. 13-14.
[282] Ibid., p. 24.
[283] Ibid., p. 18.
[284] Ibid., p. 15
[285] Ibid., p. 14.
[286] Ibid., p. 105.
[287] Ibid., p. 15.
[288] Ibid.
[289] Ibid., pp. 19, 24.
[290] Ibid., p. 19.
[291] Ibid.
[292] Ibid., p. 16.
[293] Ibid.
[294] Ibid., p. 19.

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5

Urban Growth and Decay in the South

The area lying between the southernmost towns of Maharashtra and the northernmost towns of Karnataka has not received sufficient attention from archaeologists. Nearly six early historic sites have been excavated in the western region of Karnataka. But we may consider Sannathi in Gulbarga district, which is an explored site. It seems to be a town with Buddhist affiliations, between the first century BC and the third century AD. The site shows a stupa, sculptural pieces and architectural relics. All these are called typically Sātavāhana.[1] Coins are not known, but inscriptions are found. A piece of rouletted ware suggests Roman contact and possible use of sophisticated pottery. Sātavāhana tile pieces, shell bangles and beads of semiprecious stones also appear.[2] Although only excavation can provide a clear culture sequence, exploration suggests that the site was abandoned after the third century AD.

Desertion took place after *c.* AD 225 in Vadgaon-Madhavapur located in Belgaun district. Excavated for seven seasons, it seems to be a major Sātavāhana culture site. Settlement began here in *c.* 400 BC with the users of the black-and-red ware. In the pre-Sātavāhana phase punch-marked coins are found.[3] The Sātavāhana period is rich in brickwork.[4] A street was exposed to a length of more than one hundred metres with a width of seven metres. Its rammed flooring showed a stratigraphic succession of seven phases.[5] On the northern side of the street a baked brick circular granary was found.[6] Russet-coated ware, and red ware sprinklers appear. There is also evidence of tiled roof.[7] Terracotta objects and beads of semiprecious stones have been unearthed in all the excavations.[8] Glass objects and ivory dice were in use.[9]

The site seems to be exceptionally rich in coins. Along with a good number of Sātavāhana coins, the Mahāraṭhī coins also occur.[10] Coins

[1] *IAR, 1966-67*, p. 29. [2] Ibid. [3] *IAR, 1971-72*, p. 38.
[4] *IAR, 1971-72*, p. 38; *1973-74*, p. 17; *1974-75*, p. 17; *1975-76*, p. 19; *1976-77*, p. 24.
[5] *IAR, 1977-78*, p. 24. [6] Ibid., p. 25.
[7] S.H. Ritti, ed., *A Decade of Archaeological Studies in South India*, p. 95.
[8] *IAR, 1977-78*, p. 25. [9] *IAR, 1971-72*, p. 30; *1972-73*, p. 26; *1974-75*, p. 17.
[10] S.H. Ritti, ed., op.cit., p. 95.

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found here comprise lead, potin and copper.[11] Kṣatrapa[12] and Roman coins[13] have also been found. What is more significant, coin moulds occur.[14] This suggests that Vadgaon-Madhavapur was a mint town. It seems that the site was in occupation till the beginning of the third century AD,[15] after which most sites with Sātavāhana associations came to an end.

Maski, in Raichur district, is located on the bank of a tributary of the Tungabhadra. It started as a chalcolithic settlement followed by the megalithic phase in association with iron. Its historical period started with the introduction of coinage and a sophisticated pottery called the russet-coated painted ware or the Andhra painted ware.[16] Burnt brick structures and brickbats were encountered. Flesh rubbers and terracotta figurines were noticed. Beads and bangles of both glass and semiprecious stones occurred. But, above all, the shell accounted for most beads and bangles, which shows the popularity of the shell industry.[17] The last phase of occupation was the 'medieval period'[18] assigned to *c.* AD 1000-1600.[19]

Brahmagiri is located in Chitradrug district. The village of Siddapur, where three adjacent copies of Aśoka's Minor Rock Edict no. 1 have been found, lies in its neighbourhood, and Brahmagiri itself may have been identical with the township of Isilā mentioned in the Edict.[20] Settlement began at this site in neolithic times. Phase III is identical with the Andhra culture. It shows a far more sophisticated pottery.[21] Besides the usual black-and-red ware, russet-coated pottery appears. We also find kaolin ware, and Roman contact is indicated by the rouletted ware.[22] Rings and bangles of not only clay and bone, but also of shell, glass, gold and bronze were found.[23] Beads were made of shell, glass, and semiprecious stones.[24] Many bronze objects such as rings, bangles, bell, rattle, and bracelet were found.[25] A potin coin was picked up on the surface.[26] Apparently the site came to an end in the third century AD.

Chandravalli or the Moon Village located in Chitradurg district began as a megalithic site. Historical settlement appeared in the Sātavāhana regime, and the main phase of occupation coincided with the first-second centuries AD.[27] A huge structure comprising many rooms and several

[11] *IAR, 1971-72*, p. 38; *1972-73*, p. 26; *1974-75*, p. 17; *1976-77*, p. 24.
[12] *IAR, 1977-78*, p. 25; *1976-77*, p. 24. [13] *IAR, 1977-78*, p. 25. [14] Ibid.
[15] Ibid., p. 24.
[16] B.K. Thapar, "Maski 1954: A Chalcolithic Site of the Southern Deccan", *AI*, no.13, 1957, pp. 15, 119.
[17] Ibid., p. 15. [18] Ibid. [19] Ibid., p. 20.
[20] R.E.M. Wheeler, "1947-48. Brahmagiri and Chandravalli 1947: Megalithic and other Cultures in the Chitaldrug District, Mysore State", *AI*, no. 4, p. 185.
[21] Ibid., p. 203. [22] Ibid., p. 236. [23] Ibid., pp. 260-61.
[24] Ibid., pp. 264-67. [25] Ibid. [26] Ibid.
[27] R.E.M. Wheeler, op. cit., *AI*, no. 4, p. 270.

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floors together with the russet-coated painted ware[28] probably belongs to this period. Long known as a source of Sātavāhana coins, the site has yielded abundant coins including two *denarii* of Augustus (23 BC-AD 14) and three of Tiberius (AD 14-37). They show that more than Brahmagiri this town lay in the mainstream of the Andhra culture.[29] An unstratified find of a Mediterranean amphora[30] and a jar comparable to amphora in red ware[31] confirm its Roman contacts. Bangles made of glass and ivory as well as ivory dice and needle-shaped rod were discovered.[32] Beads of shell, glass and semiprecious stones were found.[33] The date of the end of occupation is not clearly indicated, but coins of the Ānandas and the Mahāraṭhis[34] suggest that habitation continued under the successors of the Sātavāhanas till the fourth century AD or so. After a long gap, coins of Muslim and Mysore Wadeyars and some sculptures, 'probably belonging to late medieval period',[35] indicate reoccupation. In Wheeler's view evidence of occupation extend into the Middle Ages, but he neither indicates signs of habitation in the early medieval period nor defines the term 'Middle Ages'. Even in his opinion the main phase coincides with the Sātavāhana regime of the first-second centuries AD.[36] It therefore seems that Chandravalli was practically uninhabited in early medieval times (Fig. 20).

Banavasi in North Kanara district was the capital of the Kadambas. Its early historical period possesses the culture of Sātavāhana times, marked by russet-coated painted ware, black-and-red ware, rouletted ware and brick fortification.[37] Banavasi was enclosed by a fortified wall which was repaired in two phases.[38] The site also shows an apsidal temple,[39] which is not dated. A fragmentary inscription in boxheaded characters mentions the name of early Kadamba rulers,[40] which suggests that occupation may have lasted till the sixth century AD. Banavasi was probably visited by Hsüan Tsang.[41]

Portions of Karnataka seem to have been littered with deserted towns in the seventh century. While travelling northwards from the Drāviḍa country with Kāñcī as its capital, Hsüan Tsang entered a wild forest, in which he noticed a succession of deserted towns, or rather small villages.[42] At the end of this journey he reached Konkan.[43] Obviously the Chinese pilgrim

[28] *IAR, 1977-78*, p. 27. [29] *AI*, no. 4, p. 270. [30] Ibid., pp. 277-87.
[31] *IAR, 1977-78*, p. 27. [32] Ibid., p. 29. [33] Ibid. [34] Ibid.
[35] Ibid. [36] *AI*, no. 4, p. 270. [37] *IAR, 1970-71*, p. 29. [38] Ibid.
[39] Ibid. [40] Ibid. [41] Ibid., Cf. *Si-Yu-Ki*, II, pp. 253-54, fn. 40.
[42] *Si-Yu-Ki*, II, p. 253. Samuel Beal suggests that the passage may also be translated as "passing through (or by) a deserted town and many little villages". (fn.39). But he prefers the translation "a succession of deserted towns, or rather little villages".
[43] *Si-Yu-Ki*, II, p. 253.

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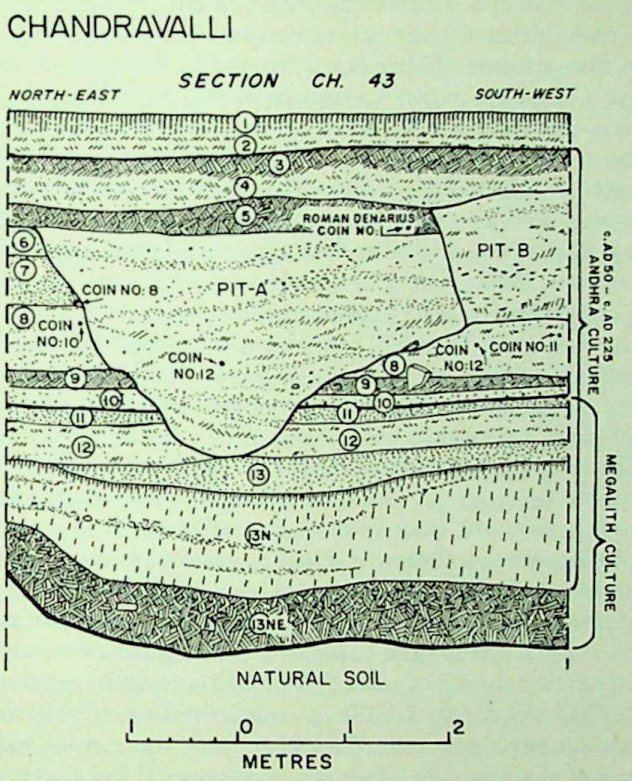


FIG. 20. Chandravalli section CH. 43 after R.E.M. Wheeler, "Brahmagiri and Chandravalli 1947: Megalithic and other Cultures in the Chitaldrug District, Mysore State", *AI*, no. 4, 1947-48.

must have passed through Karnataka, where he found many abandoned towns. His observation is broadly attested by excavations.

Many sites excavated in Andhra Pradesh show urban occupation lasting up to the third century AD or so. These are generally major Sātavāhana culture sites which participated in the Indo-Roman trade. We may begin with Peddabankur in Karimnagar district. The site revealed a megalithic phase followed by the historical period, which is divided into two sub-periods, IIA and IIB.[44] Subperiod IIA shows red ware, black-and-red ware and a punch-marked coin. A terracotta ring well is the only relic by way of structure. A terracotta seal depicting Gaja-Lakṣmī, beads of glass and semiprecious stones, iron and copper objects and terracotta figurines

[44] *IAR, 1968-69*, pp. 1-2.

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occur.[45] Subperiod IIB is rich in Sātavāhana coins. It also has a Roman silver coin of Augustus Ceaser. A terracotta seal inscribed in early Brāhmī characters also appears. There is no change in the pottery of this subperiod. But a large square brick *maṇḍapa* or pavilion has been exposed.[46] This site was abandoned in the third century AD after which archaeology is silent about it.

Excavation at Dhulikatta, a Sātavāhana site in Karimnagar district, exposed a mud fortification, several walls and gateways. It could be one of the thirty walled towns of the Andhras described by Pliny.[47] In the construction of walls, floors, and gateways baked bricks were used liberally.[48] Lime was used as both mortar and plaster; we also hear of lime-concrete.[49] Outside the fort we find a palace complex with residential quarters.[50] This area shows six phases of structural activity,[51] all belonging to the Sātavāhana period. Phase III is the most important; it shows spacious halls with floors paved with bricks.

Huge brick-built granaries were found in phases III and IV. They were in the shape of inverted pyramids narrowing towards the base.[52] Significantly enough, from the massive granaries of Phase III potin coins and a few gold beads were recovered.[53] This suggests the sale and purchase of foodgrains by wholesalers and ordinary town dwellers who paid in cash. The same phase also shows grain-measures.[54] In any case coins were freely used at Dhulikatta. Excavation exposed a rectangular mould with sixteen matrices of varying shapes of coins.[55] A mould for punch-marked coins was also found.[56] Undoubtedly Dhulikatta was a mint town.[57] A hoard of 169 silver coins was also discovered.[58] Several Sātavāhana coins made of lead and potin and also one coin of silver were found.[59] We also get a Roman coin of base silver showing the head of Emperor Augustus.[60] A terracotta figurine wearing a discular hat seems to represent a Roman trader.[61] But we have a kaolin figure of a Yakṣa,[62] and it is held that kaolin came to India in association with Roman trade. Iron objects include not only axes, sickles, and spades but also ladle, lamp, nails, rivets and hinges,[63] which may have been used in urban houses. Other objects which betray the urban character of Dhulikatta include beads of semiprecious stones and beautiful ivory objects.[64]

[45] Ibid., p. 2. [46] Ibid., pp. 1-2. [47] S.H. Ritti, ed., op. cit., p. 62.
[48] *IAR, 1974-75*, p. 3; *1975-76*, pp. 2-3; *1976-77*, pp. 4-5. [49] *IAR, 1975-76*, p. 2.
[50] *IAR, 1976-77*, p. 4. [51] Ibid. [52] S.H. Ritti, ed., op. cit., p. 65.
[53] *IAR, 1976-77*, p. 4. [54] S.H.Ritti, ed., op. cit., p. 61. [55] Ibid.
[56] *IAR, 1975-76*, p. 2. [57] *IAR, 1974-75*, p. 3; *1975-76*, p. 2; *1976-77*, pp. 4-5.
[58] *IAR, 1976-77*, pp. 4-5. [59] Ibid., p. 5. [60] *IAR, 1975-76*, p. 2.
[61] *IAR, 1976-77*, p. 5; S.H. Ritti, ed., op. cit., p. 60. [62] *IAR, 1975-76*, p. 2.
[63] Ibid. [64] *IAR, 1976-77*, pp. 4-5.

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The last phase of structural activity in the palace complex area shows a "remarkable change in the habitation pattern."[65] Bricks were no longer used. Over the debris of the earlier phases small hutments appeared. These probably accommodated peasants, conch-cutters, bead and bangle makers.[66]

Dhulikatta was a town with Buddhist associations. Outside the fort it had a stupa built towards the end of the third century BC. Inscriptions show that it was renovated in the second century BC.[67] It seems that the stupa lost its importance earlier, and later the rest of the urban site ended around the third century AD.

At Polakonda in Warangal district excavation was carried out at two places, PKD I and PKD II.

The first phase of PKD I was pre-Sātavāhana with black-and-red ware as the predominant pottery. A solitary copper coin inscribed in Brāhmī characters was found. Black-and-red ware continued throughout the Sātavāhana or the second phase. The late Sātavāhana phase shows storage-jars with fingerprint designs in red ware. Brick walls were exposed, but structures were made of rubble and bricks.[68] PKD I does not seem to be urban on the present showing. It was probably abandoned in the third century AD and reoccupied only under the Kākatīyas.[69]

PKD II shows neolithic, megalithic and medieval periods. Medieval would mean a period beginning around 1000 or afterwards.

At Pedamarrur in Mahbubnagar district the megalithic phase was far more dominant than the historical phase. In the historical or the Sātavāhana phase stone was used for construction, and red polished and coarse red wares dominated the pottery. Beads of semiprecious stones and bangles of shell and copper occurred. Iron artefacts included a socketed hoe and knives.[70] Although the site cannot be considered fully urban, it was abandoned in the third century AD.

Yeleśwaram in Nalgonda district is located on the bank of the river Krishna adjacent to the Nagarjunakonda valley, which was studded with Buddhist sites. It started as a megalithic site in *c.* 150 BC. Period II or its early historical period is dated roughly between the first and the second century AD. Its constructions include a bathing ghat with flight of stone steps leading to the Krishna.[71] Large bricks were also used. What is more important, the entire site appeared to be like a rectangular citadel fortified by walls.[72] The site shows advanced drainage. Drains were connected with

[65] Ibid., p. 4.

[66] Ibid., p. 4; S.H. Ritti, ed., op. cit., p. 66.

[67] *IAR, 1975-76*, p. 2.

[68] Ibid., pp. 5-6.

[69] Ibid., p. 5.

[70] *IAR, 1977-78*, p. 12.

[71] Mohammad Abdul Waheed Khan, *A Monograph on Yeleswaram Excavations*, p. 9.

[72] Ibid., p. 10.

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soak-pits in the low-lying land.[73] The houses were probably roofed by joining the tiles with iron nails. Building construction was in a highly improved state at "the lower levels which actually saw Yeleśwaram in its palmy days". We notice a high quality of pottery. Sprinklers were found in red polished ware and in other wares.[74] Terracottas included human and animal figurines. Most female figurines were of mother goddess including those of nude goddess.[75] Glass bangles were also found.[76] Period III at Yeleśwaram saw the rule of the Ikṣvākus whose capital Vijayapurī in the Nagarjunakonda valley lay close to Yeleśwaram. A regular town planning and a fine system of sanitation, which included closed drains, internal drainage, bitumen-paved bathrooms and lavatories connected with soak-pits, recall the prosperous days of the site.[77] Sprinklers of different types continued,[78] but we find pedestalled bowls, hollow-knobbed lids and a pointed beaker.[79] Glass and shell bangles and terracotta moulds were found.[80] Period III is assigned to the early part of the third century AD.[81] During its heyday this period "heralded definitely a higher state of life under the famous Ikṣvāku rulers".[82]

During periods II and III Roman contact and maritime traffic are attested by many red polished sprinklers, terracottas cast in double moulds, and a gold coin of the famous Roman emperor Septimus Serverus (AD 193-211).[83] A Roman jar painted with black band has also been found.[84] A wide range of Sātavāhana coins[85] shows the use of local money, and inscriptions show a fair amount of literacy. All told, periods II and III suggest an urban environment in Yeleśwaram. The settlement was damaged by the floods of the Krishna probably at the end of Period III.

Period IV covered *c.* AD 300-500. Red polished ware and black-and-red ware disappeared, but terracottas, glass bangles, etc., continued. The period is known for two stupas, some sculptures, and above all for forty-nine coins of the Viṣṇukuṇḍins.[86]

Period V probably covered *c.* AD 500-1000.[87] However its cultural assemblage is attributed to the ninth or the tenth century AD,[88] and nothing particular is known about the earlier centuries. The Yeleśwaram temple was built about the beginning of the eleventh century.[89] Most structures were now built in rubble stone though temples or *devakulas* were also made of brick. Instead of big brick drains noticed in the earlier period, clay pipes of pottery were used.[90] Although the site was not given up completely,[91] decline set in between the fifth and tenth centuries AD.

[73] Ibid. [74] Ibid. [75] Ibid., pp. 10-11. [76] Ibid., p. 11.
[77] Ibid., p. 12. [78] Ibid., p. 13. [79] Ibid., p. 12. [80] Ibid., p. 13.
[81] Ibid. [82] Ibid., p. 14. [83] Ibid., p. 13. [84] Ibid.
[85] Ibid. [86] Ibid. [87] Ibid., pp. 15-16. [88] Ibid., p. 15.
[89] Ibid. [90] Ibid., p. 16. [91] Ibid., p. 66.

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Lying forty-three miles west-northwest of Hyderabad, Kondapur in Medak district was a typical Deccan town which did not last beyond *c.* AD 200.[92] Only a part of the eight-acre mound, at a distance of half a mile from the village of Kondapur,[93] was excavated, yielding both secular and religious structures. Religious remains comprise a monastery, two *caityas* and a *stupa*.[94] Bricks and tiles were used in both private houses and religious buildings. Some shops and houses had rubble walls, and their roofs were made of straw.[95] Underground chambers or *chaubachchās* are a special feature of shops (?) and private houses, and contain coins, coin moulds, seals, terracotta figurines, beads, gold ornaments or other articles considered precious by the dwellers of the house those days.[96]

Yazdani regards Kondapur a great religious centre also,[97] and thinks that these terracottas were preserved because of their religious importance,[98] but they may have been also drawing-room objects. The various antiquities show that Kondapur was a great centre of craft production and commodity exchange in Sātavāhana times. Apart from the craft of masons, who practised plain and vigorous architecture[99] the potter manufactured sophisticated pottery decorated with Buddhist designs.[100] Extremely thin and delicate red ware with lustrous polish[101] may have been used by the upper classes, who also possessed beads of precious and semiprecious stones.[102] Bead manufacture was an important craft,[103] though ivory objects were rare.[104] The place is noted for a large number of iron tools and weapons, which corroded on account of the very porous nature of the soil.[105] But shops with furnaces and many large earthen basins for cooling the metal yielded by the site show that "smithy work flourished on an extensive scale".[106]

Yazdani rightly emphasizes the importance of the find of a hoard of nearly two thousand coins, which included the punch-marked and Sātavāhana varieties made of lead and potin.[107] These along with coin moulds clearly mark Kondapur as a mint town.[108] We also find baked clay imitations of Roman coins of the first century AD as well as a gold coin of Augustus who ruled from 23 BC to AD 14.[109] Kondapur therefore may have participated in Roman trade. Regionally it supplied not only beads, tools, weapons and other objects but also provided the people with money to purchase articles.

[92] G. Yazdani, "Excavations at Kondapur an Andhra Town (*circa* 200 BC to 200 AD)", *Annals of the Bhandarkar Oriental Institute*, XXII, pp. 171-85.
[93] Ibid., p. 175. [94] Ibid., p. 182. [95] Ibid., p. 181.
[96] Ibid., p. 183-84. Inscribed seals belong to the first century AD, ibid., p. 181.
[97] Ibid., p. 184. [98] Ibid., pp. 183-84. [99] Ibid., p. 181.
[100] Ibid., pp. 176-77. [101] Ibid., p. 177. [102] Ibid., p. 179.
[103] Ibid., p. 181. [104] Ibid., p. 176, 181. [105] Ibid., p. 181. [106] Ibid.
[107] Ibid., pp. 180, 184. [108] Ibid. [109] Ibid., pp. 179-80.

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Yazdani states that with the decline of the Buddhist religion the site seems to have been deserted.[110] But the decline of the town seems to have caused the decline of the Buddhist faith. Evidently the city was abandoned after *c.* AD 200, the terminal point given to the life of the town by Yazdani.[111] Except for Nagarjunakonda and a few other places, ancient towns in peninsular India disintegrated and disappeared in the third century.

Kudavelli in Mahbubnagar district lies at the confluence of the rivers Krishna and Tungabhadra. Its Period I (*c.* AD 300-600) shows four phases of structural activity in a deposit of 1.6 metres. They generally show religious structures in which brick and stone are used.[112] A channel-shaped oven lined with baked bricks, exposed to a length of 1.6 metres,[113] may have been used for communal cooking; it could be considered a non-religious construction. Red-slipped and dull red wares together form nearly eighty-two per cent of the total pottery assemblage. Red polished ware accounts for 11.64 per cent,[114] and black-and-red ware for 4.62 per cent.[115] Sprinklers are found[116] and the find of kaolin ware[117] suggests possible Roman association. The find of a gold coin of the Roman emperor Constantius II (AD 337-61) and the other of the Byzantine emperor Anastasius (AD 491-518)[118] are sure signs of traffic with the Roman world, eastern and western. The Romans and the Byzantines carried on trade with this part of India even in the fourth-sixth centuries. One late Sātavāhana coin is also found.[119]

Period I came to an end in the sixth century AD, when the site was deserted. It was reoccupied after about two hundred years.[120] Period II lasted from the eighth to the sixteenth century, and had a deposit of 5.2 metres.[121] It is divided into A and B, but the habitational deposit of each division is not mentioned. The relative space given in the report to periods IIA and B makes the period eighth-twelfth centuries (A) less important than the period thirteenth-sixteenth centuries (B).[122] Period IIA saw the foundation of the early Cālukyan Saṅgameśvara Śiva temple. Besides chocolate-slipped pottery, it also showed beads, bangles and rings of glass, semiprecious stones, terracotta objects and iron artefacts. We do not hear of any coins. Residential houses were neither encountered in Period I nor in Period IIA. The excavator reports that for the first time the area was used for residential purpose in Period IIB, in which we also find coins.[123]

Satanikota in Kurnool district is situated on the right bank of the Tungabhadra. The earliest relics at the site belong to the mesolithic phase, but its main occupation in the early historical period lasted from *c.* 50 BC to

[110] Ibid., p. 182. [111] Ibid., p. 171. [112] *IAR, 1978-79*, p. 37.
[113] Ibid. [114] Ibid. [115] Ibid., p. 39. [116] Ibid., p. 38.
[117] Ibid. [118] Ibid., p. 39. [119] Ibid. [120] Ibid.
[121] Ibid., pp. 37-41. [122] Ibid., pp. 39-41. [123] Ibid., p. 41.

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c. AD 300. A fortified town was set up in Sātavāhana times, and the fort covered an area of six hectares.[124] Gateways, baked brick walls, and a brick-paved platform have been found. The roofs of several structures were built of tiles.[125] We also find a room with a partly paved drain.[126] Inside the fort a series of brick-built rectangular chambers below the ground level has been exposed. This complex was not attached to any residential buildings, and it may therefore have been a granary[127] used for feeding the fort population. Pottery comprises russet-coated painted ware, red polished ware, black-and-red ware, kaolin ware and rouletted ware.[128] Sprinklers are found. Legged querns, müllers, marbles and some stone architectural pieces occur. In addition to iron objects and copper bangles, a gold ring studded with a piece of lapis lazuli has been found. We also find a lead coin with Brāhmī legend of *c.* first century BC-first century AD.[129] All these are indications of an urban life at Satanikota. It is held that it was a small urban settlement and probably an administrative headquarters of the Sātavāhanas.

This early historical town declined around the middle of the third century AD, and from the third to the thirteenth century it remained deserted. A few coins of Alaud-Din-Khalji of Delhi and Samsud-Din-Muhammad Sah Bahmani of Bidar together with some pottery and structures show that Satanikota was reoccupied in the fourteenth and fifteenth centuries; the medieval period is represented by a thin accumulation[130] (Fig. 21).

Salihundam lies in Srikakulam district in the northernmost part of the coastal Andhra Pradesh. It is located on the banks of the Vasumdhara river. *Śāli* means 'transplanted paddy'. The place may have originated either as a great granary of rice or may have depended on the wet rice-producing hinterland, but it grew into a great Buddhist settlement. Its early phase (*c.* third-second century BC to *c.* first century AD) shows a few brick platforms, black-and-red ware and a silver punch-marked coin.[131] The middle phase (first century to third/fourth century AD) shows many stupas, *caityas* and *vihāras*, well-planned houses and stone-built pathways.[132] Black-and-red ware is supplemented by a good quantity of rouletted ware, which is considered indigenous as opposed to the foreign variety found in Arikamedu and Tamluk.[133] Inscriptions on a few rouletted ware

[124] N.C. Ghosh, "Recent Archaeological Discoveries in Krishna-Tungabhadra Valley: Satanikota", Typescript paper submitted to the South Asian Archaeological Congress, New Delhi, 1986, *IAR, 1977-78*, pp. 3-7.

[125] *IAR, 1977-78*, pp. 3-7. [126] Ibid., p. 7.

[127] N.C. Ghosh, *Satanikota 1977-78*, New Delhi, 1986, p. 86.

[128] *IAR, 1977-78*, pp. 3-7. [129] Ibid. [130] N.C. Ghosh, *Satanikota*, pp. 79, 81-82.

[131] R. Subrahmaniam, *Salihundam*, pp. 7-9. [132] Ibid., pp. 7-8.

[133] Ibid., pp. 7-9.

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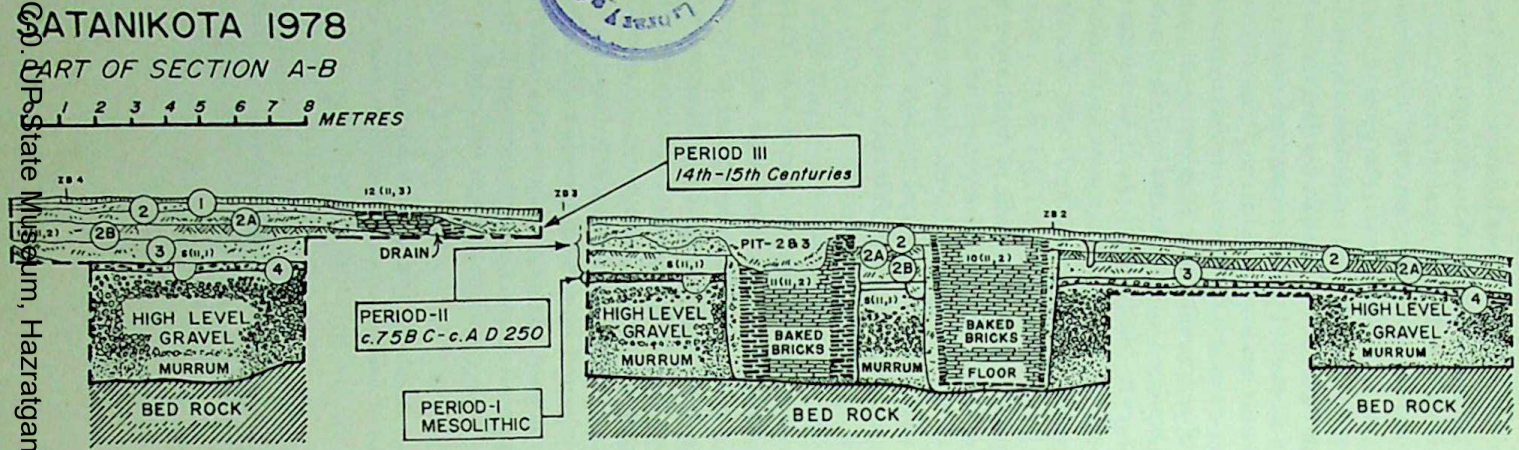


FIG. 21. Satanikota 1978 part of section A.B. after N.C. Ghosh, *Excavations at Satanikota*, New Delhi, 1986, fig. 28.

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sherds are attributed to a period from the second century BC to the third-fourth century AD,[134] but they may have first appeared in the first century AD. Sātavāhana lead coins and Puri Kuṣāṇa coins have been found.[135] All the finds provide good signs of urbanism at Salihundam.

The late phase, fourth-fifth century to seventh-eighth century, was beset with decline. Earlier construction materials were used in a pillared pavilion (*maṇḍapa*). Random rubble revetments appeared in this phase.[136] For about four centuries the pottery types recovered in the earlier phases continued to be reproduced.[137] However many stone objects including numerous querns and beads of crystal and quartzite were unearthed. Six stone inscriptions belong to the seventh-eighth centuries by which time occupation came to an end.[138]

Rajahmundry situated on the eastern bank of the Godavari in East Godavari district was a Buddhist settlement. It was mainly habited in the second-fourth centuries AD. This period shows a stupa and the wall of a monastery built of baked bricks.[139] A circular brick structure with an internal diameter of 3.6 m and a height of 85 cm[140] may represent a storage bin. Red polished ware and Arretine ware occur;[141] the latter indicates Roman connections. Obviously the settlement decayed after the fourth century AD. Some of its finds include coarse red ware ascribable to *c.* sixth-seventh centuries AD.[142] After that a brick structure of the thirteenth century AD is noticed.[143] Nothing belonging to the long interval covering six centuries or more is reported.

Dharanikota in Guntur district is located on the right bank of the Krishna river. It was a megalithic black-and-red ware settlement (*c.* 200 BC), which entered the historical period in the first century AD under the Sātavāhanas. Under the later Sātavāhanas Dharanikota along with Amaravati formed part of their ancient capital Dhānyakaṭaka.[144] Dhānyakaṭaka had in its neighbourhood several villages, Buddhist settlements, and an inland port, but this whole area has not been studied in the context of 'a complete city'.[145] The citadel's occupation lasted till the fourth century AD.[146] In the early historic period the fortified site shows drains and soak-pits, catering to the sanitary needs of the settlement. We find a brick wharf built along the inner side of an earlier navigational channel.[147] A circular brick structure within the fortified area may have

[134] Ibid., pp. 8-9. [135] Ibid., p. 8. [136] Ibid., p. 9. [137] Ibid.
[138] Ibid. [139] *IAR, 1979-80*, p. 1. [140] *IAR, 1980-81*, pp. 1-2.
[141] *IAR, 1979-80*, p. 1. [142] *IAR, 1980-81*, p. 1. [143] Ibid.
[144] H. Sarkar and S.P. Nainar, *Amaravati*, p. 6.
[145] H. Sarkar, "Growth of Cities in Andhradeśa (200 BC to AD 300)", Presidential Address, Tenth Andhra Pradesh History Congress, 1986, unpublished, pp. 2-3.
[146] *IAR, 1962-63*, pp. 1-2; *1963-64*, pp. 2-4; *1964-65* pp. 2-3.
[147] *IAR, 1962-63*, pp. 1-2.

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been a well or a barn.[148] A tiled platform forms part of the latest structural activity,[149] which belongs to the fifth phase of this period and may have been post-Sātavāhana. Rouletted ware and amphorae found in different phases[150] bespeak Roman influence. Glass bangles of various colours occur. An inscribed ivory seal showing a stupa with railings belongs to the second-third centuries AD.[151] Late Sātavāhana coins are found in good numbers.[152] Crucibles[153] attest the importance of smithy.

An inscribed potsherd of the fourth century AD[154] suggests that the occupation of Dharanikota did not last much beyond that date. The main occupation site may have been abandoned earlier, for just after the second or third century AD rubble walls were built to stop erosion by rains or floods.[155] Regarding the Dhānyakaṭaka country, Hsüan Tsang states that much of it is desert and its towns are thinly populated.[156] He adds that the convents, though many, are mostly ruined and deserted. However he mentions one hundred Deva (brahmanical) temples, frequented by people of different beliefs.[157]

Kesarpalle in Krishna district lies about twenty km north-east of Vijayawada on the Madras-Calcutta Trunk Road. It began as a chalcolithic settlement followed by a megalithic phase. Its historical period starts with the find of rouletted ware,[158] which may denote the spread of Roman influence. This ware was highly valued, because one of its sherds, collected from the surface, had a rivetting with iron pins.[159] The Sātavāhana phase does not seem to be important. But the Ikṣvāku phase yielded brick structures, Ikṣvāku lead coins, and beads of glass, stone and terracotta.[160] The site fell into disuse in the middle of the fourth century (fig. 22). Symptoms of occupation appear in late medieval times, and betray 'a decadent pottery tradition similar to that of late medieval times of Nagarjunakonda and Yeleśwaram.'[161]

Amaravati in Guntur district was a Buddhist township in the Krishna-Godavari basin in the early Christian centuries. It is known for its stupa and beautiful stone sculptures, much of which was removed to the British Museum, London. Its Period I began with the NBP Ware, probably around 300 BC. Period II is marked by rouletted ware, which connotes Roman contact. Limestone sculptures belong to the second-third centuries AD.[162] The Sātavāhana phase was a period of great artistic efflorescence that gave the *mahācaitya* the most impressive form "unsurpassed in

[148] *IAR, 1964-65*, p. 2. [149] Ibid. [150] Ibid., pp. 2-3. [151] Ibid.
[152] Ibid. [153] Ibid. [154] *IAR, 1962-63*, p. 2. [155] *IAR, 1964-65*, p. 3.
[156] *Si-Yu-Ki*, II, p. 221. [157] Ibid. [158] *IAR, 1961-62*, pp. 1-2.
[159] H.Sarkar, "Kesarapalle 1962", *AI*, no. 22, p. 43. [160] *IAR, 1961-62*, p. 2.
[161] H. Sarkar, "Kesarapalle 1962", *AI*, no. 22, p. 43.
[162] *IAR, 1958-59*, p. 5.

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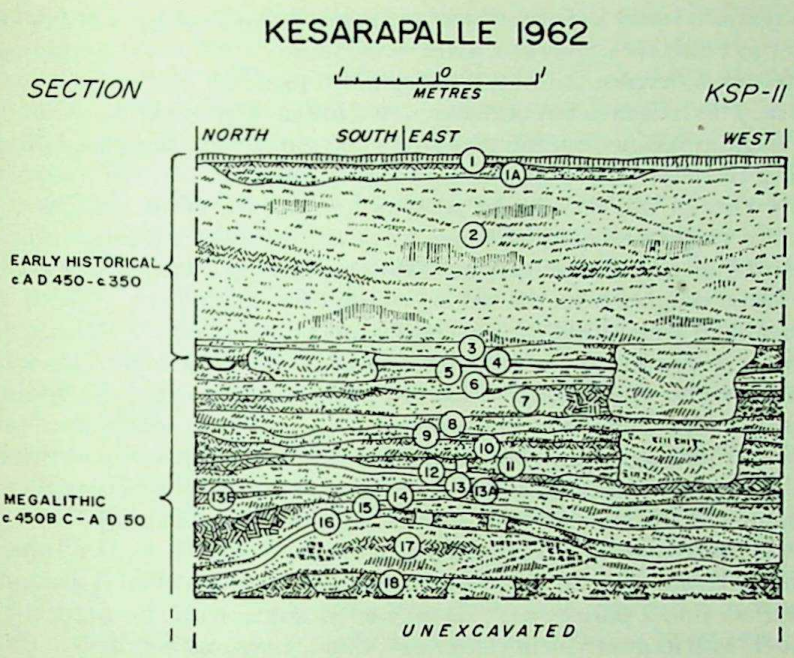


FIG. 22. Kesarpalle 1962 section KSP-II after H. Sarkar, "Kesarpalle 1962", *AI*, no. 22, 1966, fig. 3.

the history of stupa architecture in the south".[163] Although the stupa was in use till the fourteenth century, it certainly lost in importance.[164] If we leave out the stupa there is an apparent gap in habitation after the third century, for the celadon ware and *tāntric* icons found in Period II are assigned to the ninth-tenth centuries.[165] However by itself Amaravati does not seem to be strongly urban even in the early Christian centuries.

Chandavaram in Prakasam district was a Buddhist settlement with a *mahāstūpa* and a monastic establishment. Its art shows the influence of Amaravati.[166] Besides the use of baked bricks, lime was used for plastering and concrete flooring.[167] Near the stupa a five-metre long slate-lined drain has been noticed.[168] The urban character of the Buddhist settlement is indicated by the use of rouletted ware.[169] More importantly, coins of the Sātavāhana ruler Yajña Śrī Śātakarṇi[170] and lead coins with the symbols of horse and bull were found.[171] Apparently the settlement came to an end after Sātavāhana times, for no antiquities are ascribed to the later period.

[163] H. Sarkar and S.P. Nainar, *Amaravati*, p. 14. [164] Ibid., p. 16. [165] Ibid.
[166] *IAR, 1974-75*, p. 6. [167] *IAR, 1975-76*, pp. 3-4. [168] Ibid., p. 4.
[169] *IAR, 1974-75*, p. 7. [170] *IAR, 1975-76*, p. 4. [171] *IAR, 1974-75*, p. 7.

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Nagarjunakonda in Guntur district lay on the bank of the Krishna in a valley in a hilly area, sixty-five miles west of Amaravati. It owed its importance to hill defence on three sides and not to much of trade and commerce. This hilly area has been converted into a huge water reservoir called Nagarjunasagar, but the remains of the old site are preserved on the hilltop through their transplantation. Horizontal excavation gives us a better view of this site. As the most prominent Buddhist settlement in Andhra Pradesh, Nagarjunakonda saw the growth of Buddhist art and culture from the third century BC to the third century AD.[172] But its active life lasted roughly from the second to the fifth century AD, when it was embellished with Buddhist and brahmanical structures.[173] Nearly two dozen monasteries can be counted at this site.[174] More than thirty Buddhist establishments were erected within one hundred years in the third-fourth centuries AD.[175] Besides monasteries many stupas, *mahācaityas,* and *maṇḍapas* have been exposed. Together with its brahmanical shrines[176] and its citadel complex, Nagarjunakonda appears to be the richest place in structures in the early centuries of the Christian era. The settlement was built in the second-third centuries under the patronage of the Ikṣvākus.[177]

The city-site close to the religious settlement was called Vijayapurī, where we find a palace-site.[178] It may be identical with the citadel. The citadel "with its grand fortification wall, ditch, gates and barracks ... threw light on the town-planning and flourishing condition of the capital of the Ikṣvāku kings during the third century AD".[179]

Although a seat of politics and religion, Nagarjunakonda was a centre of artisans and merchants. The bulk of its population lived outside the citadel in houses constructed along broad roads which were intercepted by crossroads and by-lanes.[180] Several houses appear as shops or centres of crafts. One house contained a goldsmith's entire stock in trade,[181] which included crucibles, and moulds of various designs.[182] Another house contained a hoard of gold ornaments including a necklace with a Roman coin as the pendant.[183] Guilds of confectioners, sellers or growers of betel-leaves, masons and artisans existed.[184] Nagarjunakonda had a flourishing shell-cutters' industry, which also existed at some other peninsular sites.

[172] Y.D.Sharma, "Exploration of Historical Sites", *AI*, no. 9, 1953, p. 167.

[173] *IAR, 1954-55*, pp. 22-23; *1955-56*, pp. 23-26; *1956-57*, pp. 35-38.

[174] *IAR, 1954-55*, pp. 23-26; *1956-57*, pp. 35-38; *1957-58*, pp. 6-9.

[175] H.Sarkar, "Some Aspects of the Buddhist Monuments at Nagarjunakonda", *AI*, no.1, 1960, p. 65; H. Sarkar and B.N. Misra, *Nagarjunakonda*, p. 31.

[176] *IAR, 1954-55*, pp. 22-23; *1955-56*, pp. 25-26; *1956-57*, pp. 36-37.

[177] *AI*, no. 9, pp. 167-68. [178] Ibid., p. 168. [179] *IAR, 1957-58*, p. 5.

[180] Sarkar and Misra, *Nagarjunakonda*, pp. 20-21. [181] Ibid., p. 21.

[182] Ibid., p. 58. [183] Ibid., p. 21. [184] Ibid., p. 22.

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In addition to limestone and terracotta objects,[185] beads of semiprecious stones as well as glass[186] suggest either local production or trade in these goods. Many ivory bangles have been recovered.[187] Coin moulds, particularly of Gautamīputra Śātakarṇi,[188] suggest that Nagarjunakonda was a mint town. The copper coins of the Sātavāhanas and the lead coins of the Ikṣvākus have been found.[189] The merchant community probably lived in its colony in the valley.[190] A trader (*śreṣṭhi*) headed the citizens' council (*śreṣṭhipramukhanigama*). We hear of a trader installing a Buddha image in a *caitya*.[191] Roman contacts are indicated by the coins of Tiberius (AD 16-31) and some others.[192] A gold coin of Hadrian (AD 117-38) has also been recovered.[193] A clay bullae, possibly copied from a Roman coin occurs.[194] Handles of the Roman amphorae also appear.[195] An amphitheatre, with a capacity of one thousand spectators,[196] was probably inspired by the Roman tradition.

In spite of Roman contacts, work in jewellery, minting and shell-cutters' industry, Nagarjunakonda was not important in handicrafts. Kondapur accounted for 23,391 beads, [197] but Nagarjunakonda lacked bead industry.[198] Of the thirty-two ivory and bone objects, twenty-two are dice.[199] Copper, bronze and lead objects number eighty-four. Although iron artefacts including one ploughshare number 1501, there is no evidence of iron smelting.[200] It therefore seems that the city did not have to give much in return. This can be inferred from the fact that the number of minor antiquities found at Nagarjunakonda is too meagre to the area of its excavation. H. Sarkar holds that the settlement suffered slow desiccation because of the lack of any economic base or commercial advantage. He adds that most archaeological sites passed through more or less a similar process before virtual desertion.[201] Whatever may be the reasons of urban decline, there is no doubt that there was a break in occupation at Nagarjunakonda after the fourth century AD.

Evidence of some 'early medieval' occupation is provided by a Śiva shrine and dull grey pottery,[202] but the advent of the 'early medieval' period is not dated. So far archaeologists have usually placed it around AD 1000. Several centuries later we find two tiny silver coins of the Vijayanagara King Harihara II.[203] Although Nagarjunakonda was an Ikṣvāku town,

[185] *IAR, 1954-55*, p. 23. [186] Ibid. [187] *IAR, 1955-56*, p. 26.
[188] *IAR, 1956-57*, p. 38. [189] Ibid.
[190] Sarkar and Misra, *Nagarjunakonda*, p. 21. [191] Ibid., pp. 21-22.
[192] *IAR, 1956-57*, p. 36. [193] *AI*, no. 9, p. 168. [194] *IAR, 1957-58*, p. 9.
[195] Ibid. [196] Sarkar and Misra, *Nagarjunakonda*, p. 22.
[197] H.Sarkar, "Growth of Cities", unpublished, p. 21. [198] Ibid., p. 22
[199] Ibid.
[200] Ibid., p. 21. [201] Ibid. [202] *IAR, 1957-58*, p. 8. [203] Ibid.

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 9928

its residential units resemble in layout those found in Sātavāhana levels at Brahmapuri and Kolhapur.[204] Similarly most of its pottery types resembled those from Arikamedu, Brahmagiri, Chandravalli and Sisupalgarh.[205] Apparently the settlement suffered and decayed after the Ikṣvāku phase, i.e. a century later than the decay of Sātavāhana sites. We notice little evidence of trade and commerce after the fourth century or so.

Although the Buddhists were mainly active in Bihar and eastern Uttar Pradesh in early historic times, archaeologically the connection between urbanism and monasticism is not so strong in these areas as in Andhra. Buddhism flourished in Andhra as long as urbanism and trade flourished. Over sixty Buddhist monasteries, assigned to Andhra, appear in the third century AD.[206] About twenty are located in the lower Krishna valley.[207] Many of them lay on the trade routes and close to towns and townships. Not only individual artisans and merchants supported Buddhist establishments but organized urban bodies such as *goṣṭhis* and *nigamas* also joined these efforts. Thus a pillar inscription of the second century BC speaks of the gift of the *nigama* (town?) or Dhānyakaṭaka.[208] But the decline of trade and towns after third century AD led to the decay of Buddhist monasteries around the fourth century.

In Tamil Nadu most sites are located in the plains, particularly in the coastal belt. Those with Pallava associations seem to have been occupied in the early medieval period, but generally their urban character is not clear. We come across several Indo-Roman trading ports or stations, although places with Roman connections in the south are not so many as in the Deccan.

Kanchipuram in Chingleput district has been a famous temple town. The excavated material from this site covers pre-Pallava, Pallavas, Cola and Vijayanagara periods. Kanchipuram began as a black-and-red ware settlement around the third century BC. Its earliest historical period (*c.* 100 BC - *c.* AD 300) is marked by baked-brick structures, possibly forming part of a Buddhist shrine. Several stupas seem to belong to this period. Russet-coated painted ware, and beads and bangles of glass also appear. Sherds of Arretine ware and rouletted ware indicate Roman contacts.[209] Although coin moulds are given a wide time-bracket (*c.* AD 300-800),[210] the discovery of a mould with the Ujjain symbol indicates Sātavāhana influence.[211] Coarse red ware, some baked-brick structures, and semiprecious stones are also ascribed to this period.[212] Local imitation amphorae can also be

[204] Ibid.
[205] *IAR, 1956-57*, p. 38.
[206] H.Sarkar, "Growth of Cities", unpublished, p. 3.
[207] Ibid., pp. 4-5.
[208] Ibid., p. 8.
[209] *IAR, 1969-70*, pp. 34-35; *1970-71*, pp. 32-33; *1974-75*, pp. 37-38.
[210] *IAR, 1974-75*, p. 38.
[211] S.H. Ritti, ed., op. cit., p. 6.
[212] *IAR, 1969-70*, p. 35.

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assigned to this period.[213] The finds attributed to *c.* AD 800-1500 are not very impressive. We may make a special note of a few sherds of the Chinese celadon ware and polished red ware with impressed designs.[214] Beads, bangles and studs of glass occur. The beads are slightly bigger than those recovered from the earlier periods.[215] However these glass objects are not dated even in broad terms of centuries. We notice less occupational activities of a secular nature in early medieval Kanchipuram, which came to be studded with temples under the Pallava patronage in the sixth to eighth centuries. According to Hsüan Tsang, Kāñcipura was the capital of the Drāviḍa country, which had some hundreds of convents (*saṃghārāmas*) and ten thousand priests. There were some eighty brahmanical temples.[216] Evidently these temples and monasteries were generally situated either in the city or in its vicinity. The city itself was four miles in circuit.[217]

Pallavamedu in Kanchipuram in Chingleput district is associated with the remains of the Pallavas covering the period from the sixth to the ninth century. Two structural phases represented by a mud platform and floorings have been noticed. In addition, a big dump extending to twenty metres, probably represents the debris of a building towards the end of the Pallava rule in the ninth century. Hearths, potsherds bearing graffiti marks, beads of glass and crystal, stucco pieces and a *liṅga* have also been found.[218] Apparently these remains do not speak of strong urbanism.

Vasavasamudram in Chingleput district is situated at the mouth of the Palar river. It shows only one period of habitation. Although only a few antiquities including two ring wells have been recovered, the presence of rouletted ware and amphorae denotes Roman connections.[219] Its occupation ended in the second century AD.[220]

Kannattur in Chingleput district in the Kaveri basin had several megaliths.[221] Period I inaugurated its historical phase with eight feet of occupational deposit. Its structures were made of brick and stone-rubble walls, it showed a drain made of pottery pipes.

Sherds of black-and-red ware were found in all layers, but its predominant pottery strongly resembled the red ware group found at Brahmagiri and Chandravalli in the Andhra levels.[222] Fragments of handmade pottery ovens on horseshoe plan were recovered. Beads of quartz and coral in different shapes and colours were found. Beads and bangles of glass were recovered. Terracotta figurines, a terracotta seal depicting an animal, and a gold pin and pin-head were found. Fragments of three copper coins were recovered.[223] All these finds suggest the urban character of Kunnattur

[213] *IAR, 1974-75*, p. 38. [214] *IAR, 1969-70*, p. 35. [215] *IAR, 1974-75*, p. 38.
[216] *Si-Yu-Ki*, II, pp. 228-29. [217] Ibid., p. 228. [218] *IAR, 1970-71*, p. 33.
[219] Ibid. [220] Ibid. [221] *IAR, 1956-57*, pp. 31-34. [222] Ibid., p. 34.
[223] Ibid.

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in the first two centuries of the Christian era. Its next habitation deposit (six feet) marked by the use of porcelain is dated to the twelfth century.[224]

Karaikadu in South Arcot district is situated thirty km south of Arikamedu. Like Arikamedu, it was also an Indo-Roman trading station on the Coromandel Coast. This is demonstrated by the discovery of rouletted ware and several fragments of amphorae. In addition to this, irregular brick structure, black-and-red ware, beads of glass and semiprecious stones were discovered.[225]

Arikamedu lies on the Coromandel Coast, three km south of Pondicherry.[226] It was an Indo-Roman trading station, probably identical with Podouke mentioned in the *Periplus of the Erythraean Sea* (*c.* AD 60-100).[227] Arikamedu turned out to be not only the first but also the most important site providing evidence for trade between India and the Roman world. It remained in occupation from the close of the first century BC to *c.* AD 200. Excavation exposed here a large warehouse, built around AD 50, and also two small tanks or dyeing vats used for preparing muslin, exported outside India.[228] It is significant that dyeing vats were found at several other sites in Tamil Nadu. Arikamedu was also a centre of bead making.[229]

The site shows four levels of successive structures,[230] besides drains and ring wells.[231] But it is really noted for the find of various types of Roman pottery and other Roman objects. Roman pottery includes the two-handled amphorae for containing oil or wine, and the smooth-surfaced wide dish with concentric bands of rouletted pattern for which it is called the rouletted ware.[232] The Arretine ware, derived from the Latin place name Arezzo or Arretium, is the third Roman ware. It is a red-glazed, high quality pottery.[233] Other imported objects include Graeco-Roman gems, a red-ware Roman lamp and Roman glass bowls.[234] Arikamedu ceased to be active after *c.* AD 200.[235] Thereafter it was despoiled for bricks in the Middle ages and later.[236] Stray finds of Cola coins and fragments of Chinese celadon ware[237] might suggest some occupation after *c.* AD 1000 (Fig. 23).

Excavation at Nattamedu in South Arcot district yielded materials similar

[224] Ibid. [225] Ibid., p. 21.

[226] For a detailed report see R.E.M. Wheeler with contributions by A. Ghosh and K. Deva, "1946: Arikamedu, an Indo-Roman Trading Station on the Coast of India", *AI*, no. 2, pp. 17-124.

[227] *AI*, no. 2, p. 124. [228] Ibid., p. 17. [229] Ibid.

[230] Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, p. 84.

[231] *AI*, no. 2, pp. 25, 27, 29, 31.

[232] Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I, pp. 83-84.

[233] Ibid., p. 84. [234] Ibid. [235] *AI*, no. 2, p. 24. [236] Ibid.

[237] *AI*, no. 2, p. 24.

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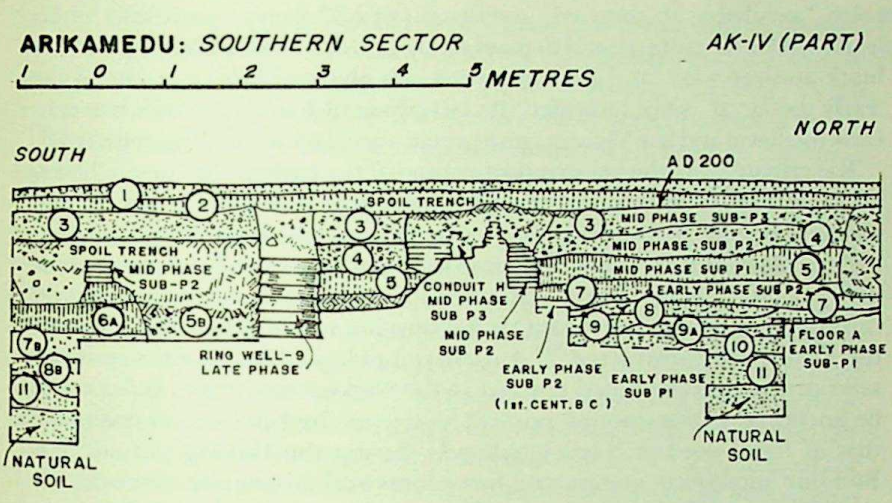


FIG. 23. Arikamedu: southern section AK IV section E-7 after R.E.M. Wheeler, A. Ghosh and Krishna Deva, "Arikamedu: An Indo-Roman Trading Station on the East Coast of India", *AI*, no. 2, 1946, plate XVII.

to those from Arikamedu. We find more than a dozen fragments of amphorae besides fine rouletted ware sherds.[238] Beads of semiprecious stones, paste and glass; and cylindrical glass-like objects in various colours were collected in the course of exploration.[239] Excavation shows it to be a centre for the manufacture of glass beads and bangles, because crucibles, waste glass slag, etc., have been recovered.[240] The site was apparently an early coastal trade centre that thrived at the beginning of the Christian era.[241] There is no information about this site in subsequent times. Apparently it was deserted after the second century AD or so.

Alagarai in Tiruchchirappalli district is situated on the northern bank of the Kaveri.[242] Period I at the site seems to begin from the third century BC. It is marked by black-and-red ware, russet-coated ware, beads and bangles of shell, beads of glass, and terracotta objects. Structural activity is shown by disintegrated brickbats. No constructions are observed in Period II. An inscribed sherd of black-and-red ware belongs to the first century AD.[243] The finds are too few to give it an urban label, but the settlement was abandoned roughly by about the first century AD.[244] However a few copper

[238] S.H. Ritti, ed., op. cit., p. 9.
[239] *IAR, 1965-66*, p. 25.
[240] S.H. Ritti, ed., op. cit., p. 9.
[241] *IAR, 1965-66*, p. 25.
[242] *IAR, 1963-64*, p. 20.
[243] Ibid., p. 21.
[244] Ibid.

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coins "ascribable to the early medieval period" were also found.[245] Its 'early medieval culture' is also marked by polished red ware, survivals of black-and-red ware, and glass and terracotta objects.[246] But the date of the 'early medieval' is not indicated. Its last phase of habitation falls between early medieval and late Vijayanagara periods, and lacks structural activity.[247]

Kaveripattinam, the ancient port-capital of the early Coḷas, lies in Thanjavur district. It figures prominently in the early Tamil texts. Its earliest remains belong to the first four centuries of the Christian era. They include black-and-red ware, rouletted ware and square copper coins of the early Colas.[248] Several brick structures are found. In the first-second century AD a small water reservoir fed by a brick-built inlet channel from the Kaveri was constructed.[249] A massive brick platform built on natural sand probably represented a wharf in the backwaters, where boats could be anchored to the wooden posts. The size of the bricks corresponds to that of those used at Nagarjunakonda during the Ikṣvāku period.[250] A Buddhist monastery comprising five rooms and a common veranda was also discovered.[251] The main building was erected in the fourth-fifth century and reconstructed later.[252] A temple structure of late Coḷa times (*c.* tenth to twelfth centuries) was also found.[253]The pre-temple phase shows only two terracotta ring wells.[254] Kaveripattinam therefore had very little occupational activity of a secular type between *c.* 500 and 1000. It became a kind of religious centre in early medieval times.

Uraiyur, the ancient capital of the Coḷas, lies in Tiruchchirappalli district in the Kaveri basin. Its earliest settlement is placed in first century BC-fourth century AD.[255] Besides black-and-red ware and russet-coated ware, we find rouletted ware and Arretine ware,[256] which show Roman contacts. Brick structures used as dyeing vats[257] suggest that the site was connected with the production of textiles. A few inscribed potsherds of the first-second century AD were also found.[258] The second period (fourth to sixth/seventh century AD) shows structural remains, brickbats, rubbles, etc. Its main occupation seems to have ended in the fifth century AD on account of floods and waterlogging.[259] Nothing is known concretely about the remains between the fifth and the seventh century.

Period III at Uraiyur is placed in *c.* eighth-fourteenth/fifteenth century. It is marked by the use of a crude, ill-fired red ware of the 'late medieval

[245] Ibid.
[246] T.V. Mahalingam, *Report on the Excavations in the Lower Kaveri Valley*, p. 65.
[247] *IAR, 1963-64*, p. 21. [248] *IAR, 1964-65*, p. 25. [249] *IAR, 1963-64*, p. 20.
[250] *IAR, 1962-63*, p. 13. [251] *IAR, 1964-65*, p. 24. [252] Ibid., p. 25.
[253] *IAR, 1970-71*, p. 35. [254] Ibid. [255] *IAR, 1965-66*, p. 26.
[256] *IAR, 1964-65*, p. 25; *1965-66*, p. 26. [257] *IAR, 1964-65*, p. 25. [258] Ibid.
[259] Ibid.

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period'. Although semiprecious stones, glass and metal objects and terracotta figurines are found, two sherds of the Chinese celadon ware[260] indicate that the site was occupied not earlier than *c.* AD 1000. Therefore in early medieval times Uraiyur seems to have been in a state of decay.

Tirukkambuliyur in Tiruchchirappalli district is situated on the banks of the Kaveri, fifty-three km west of Tiruchchirappalli. As a megalithic site it was settled by the users of the black-and-red ware.[261] Its earliest historical finds include red-ware deep bowls comparable to Kuṣāṇa bowls of north Indian sites. Terracotta figurines, beads and bangles of glass, semiprecious stones, iron and copper objects and a few copper coins constitute the other finds.[262] Its first period is placed in *c.* third century BC to *c.* third century AD.[263] The second period covers *c.* third-fourth centuries AD to ninth-tenth centuries AD.[264] In the fourth or the fifth century a huge brick granary divided into two compartments was built.[265] Houses contained rows of granaries for grain, pulses and cereals. [266] The date of the latter granaries is not indicated, although a double granary in which grain could be poured from the top is mentioned in the Śaṅgam literature.[267] The huge double granary contained a bunch of silk threads in between its two walls.[268] It might suggest silk weaving or the association of the merchants or affluent people with the granary.[269]

Although five to six centuries are assigned to the second period because of 1.5 to 1.8 metres thick deposit, [270] structural evidence does not take us beyond the fifth century AD or so. Red polished ware forms the dominant ceramic tradition. [271] Other antiquities reported from the site are poor. It is likely that the second period began in the third century AD and ended around the eighth century. Only in the third period, ninth-tenth to fourteenth-fifteenth centuries,[272] we come across numerous glass bangles,[273] although glass objects appeared in the uppermost layers of Period II around the beginning of the third century AD.[274] It therefore seems that between the fifth century and the post-twelfth centuries Tirukkambaliyur had little of occupation. If we go by the evidence of pottery alone,[275] it will appear that in the period from the third century BC to the third century AD the site was far better occupied than the following two periods.

Korkai in Tirunelveli district is located at the mouth of the Tāmbraparṇi. An ancient port of the Pāṇḍyas, it is mentioned in the fragments of classical

[260] *IAR 1965-66*, p. 27.
[261] *IAR, 1961-62*, p. 28.
[262] Ibid. There seems to be some discrepancy between T.V. Mahalingam, *Report on the Excavations in the Lower Kaveri Valley*, and that which appears in *IAR, 1961-62*, p. 28.
[263] T.V. Mahalingam, op. cit., p. 15.
[264] Ibid.
[265] Ibid., pp. 110-11.
[266] Ibid., p. 111.
[267] Ibid., p. 19.
[268] Ibid., p. 110.
[269] Ibid.
[270] Ibid., p. 16.
[271] Ibid.
[272] Ibid., p. 15.
[273] Ibid., p. 52.
[274] Ibid.
[275] Ibid., pp. 21-45.

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geographers and in the Śaṅgam literature as an important port of pearl fishing.[276] However the finds are not so impressive. They include a brick platform with a flight of steps and a soak-pit made of terracotta rings.[277] Inscribed potsherds of about the first century AD are found. Inscribed pearl oysters indicate that Korkai was important for pearl fishing. Further, sherds with graffiti marks; copper and iron objects; perforated terracotta tiles; other terracotta objects and beads of crystal are found.[278] All this connotes the urban character of Korkai, which may have gone out of occupation in the third century AD.

Adiyamankottai in Dharmapuri district is reported to have continued occupation from the first century BC to the eighteenth century AD.[279] Pottery, a brick structure, terracotta figurines, bangles of glass, iron objects, etc.,[280] are assigned to the period from the second to the seventh century AD, but whether these objects come from the earlier or the later part of the period is not stated. It is doubtful whether Adiyamankottai can be designated a town on the basis of these remains.

Perur in Coimbatore district shows continued occupation from the first to the tenth century AD and beyond. It began as a megalithic black-and-red ware site around the first century AD.[281] Its most important phase covers third to sixth centuries AD, which show a 1.60 metres thick deposit. Besides russet-coated painted ware, we get a new pottery — the blackish grey ware. We also find shell bangles;beads of glass, paste and gold. Terracotta beads and lamps are also found.[282] The next time-bracket of sixth-ninth centuries shows only one metre thick deposit. But it has a wall of baked brick and a covered stone-drain. By the tenth century the town attained the sanctity of Chidambaram through its Śrīpattiśvarasvāmi temple.[283]

Poluvanpatti in Coimbatore district had a temple with inscriptions ascribable to the eleventh century. From these inscriptions we learn of a commercial settlement located near the temple and looking after its maintenance.[284] Excavation showed that the site was occupied since 'early' times and came to an end in the medieval period due to conflagration. A terracotta seal belonging to 'early medieval times' has been recovered,[285] but it is not even roughly dated in terms of centuries. Nor is there any evidence to show that before the eleventh century Poluvanpatti was an urban centre.

Excavated sites in peninsular India show some interesting features. Kerala does not provide any instance of urbanization in early historic times. Even in Karnataka, Andhra Pradesh and Tamil Nadu towns did not appear until the third-second centuries BC.

[276] *IAR, 1968-69*, p. 32. [277] Ibid. p. 33. [278] Ibid.
[279] *IAR, 1980-81*, p. 65. [280] Ibid. [281] *IAR, 1970-71*, p. 34. [282] Ibid.
[283] Ibid. [284] *IAR, 1979-80*, p. 68. [285] Ibid., p. 69.

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Most urban centres were deserted in the third century AD. Their disappearance coincided with the end of the Indo-Roman trade and also of the Sātavāhana rule, as was also the case with the other peninsular towns in Maharashtra. A few towns continued to exist in the sixth-eighth centuries. In Tamil Nadu the Pallavas initiated temple construction in a big way in the sixth and seventh centuries. But till the last quarter of the tenth century 'temple towns' did not develop much of trade and artisanal activities.

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6

Literary and Epigraphic Sources on Urban Decline

Inscriptional evidence shows the decline of trade and urbanism in Bengal. Toshio Yamazaki has examined in depth fifteen copperplate inscriptions (from Bangladesh), dealing with the sale of land in the fifth and sixth centuries.[1] They suggest two important developments in the history of trade and towns. First, we notice the exclusion of artisans and merchants from the administration of the city after the sixth century. In the fifth and sixth centuries the city or the *adhiṣṭhāna* formed the headquarters of a district. The district of Koṭivarṣa *(viṣaya)* contained an *adhiṣṭhāna* whose administrative board or *adhikaraṇa* included the chief merchant called the *nagaraśreṣṭhin*, the chief trader called *sārthavāha* and the head of artisans called the *prathamakulika*. The mercantile, trading and artisanal elements were important enough to have a hand in the administration of the district town, and their consent to land transactions was considered necessary. No piece of land in the district could be sold unless the city board or the *adhikaraṇa* referred it to them. Yamazaki considers the *adhikaraṇa* to be mainly a court of law[2], but it may also have performed other functions. In any case clay seals show that the *adhiṣṭhānādhikaraṇa* existed in Vaishali, Gaya and Varanasi.[3] They affirm the importance of artisanal and mercantile elements in certain Gupta towns, for they mention the guild of merchants and artisans *(śreṣṭhi-kulika-nigama)* and also that of merchants, caravan leaders and artisans *(śreṣṭhi-sārthavāha-kulika-nigama)*. Literary evidence such as the one in the *Mṛcchakaṭika* supplemented by the Gupta *Smṛtis* (law-books) shows that merchants and craftsmen participated in the trials held at the *adhiṣṭhānādhikaraṇa*.[4] But their participation in administration cannot be inferred from the Pāla and Sena land grants.

Grants of land by the kings and chiefs for religious purposes became a common practice in post-Gupta centuries, but generally urban artisans and merchants were not consulted in making grants. The Pāla charters mentioned the *viṣaya* or the district in which the land or village was located and brought the grant to the notice of the officials and others. Even the

[1] T. Yamazaki, "Some Aspects of Land-sale Inscriptions in Fifth and Sixth Century Bengal", *Acta Asiatica*, 43, Japanese Studies in Ancient and Medieval Indian History, Tokyo, 1982, pp. 17-36.

[2] Ibid., p. 35. [3] Ibid., p. 34. [4] Ibid., p. 35.

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various strata of people living in the village from the brāhmaṇas down to the caṇḍālas were duly informed. In many early charters the consent *(matam)* of all the officials, dignitaries and various classes of village inhabitants was sought for the grant, but neither in this context nor in the list of people who were informed of the grant do we hear of merchants, traders and artisans living in the headquarters of the *viṣaya,* not to speak of their participation in administration. This is intriguing. It can be explained only if we presuppose that trade and urbanism languished in the seventh-tenth centuries, and those concerned with commercial and artisanal activities ceased to count in matters of land transfers and in city administration. Therefore the non-mention of traders, merchants and artisans in subsequent land charters demonstrates the sharp decline of trade and urbanism.

The second important development revealed by these fifteen copperplate land grants relates to the price of the land. Yamazaki notes that for a century the price of land did not change; in Kotivarṣa district *(viṣaya)* it remained at three *dīnāras* (gold coins) per *kulyavāpa.*[5] According to the grants the period of stability started in 443 and continued up to 543. Similarly in Vāraka *maṇḍala* the price of four *dīnāras* per *kulyavāpa* continued for several decades in the sixth century. Prices remained stable district-wise.[6] Yamazaki rightly ascribed this phenomenon to the closed nature of the *viṣayas.*[7] Evidently the presence of artisanal, mercantile and trading elements in the headquarters of Kotivarṣa did not alter land prices in the countryside. Probably it influenced urban prices. Till the end of the Gupta period artisans and traders were active in some parts of the country. In subsequent centuries the role of those who exchanged goods between one area and the other was reduced to the minimal, and the importance of the trading, mercantile and artisanal elements was very much eroded. This seems to have been the general situation between 650 and 950 in the major portion of the country.

Urban decline in Gupta times can be inferred from the forecasts made in the *Bṛhat Saṃhitā* of Varāhamihira, an astrologer who lived in the last quarter of the fifth and the first half of the sixth century.[8] He appears to be a keen observer of towns, regions, localities and various peoples.[9] He must have based his prophecies regarding them on his own experience or on that of the astrologers immediately preceding him. He stated that

[5] Ibid. [6] Ibid. [7] Ibid.

[8] *Varāhamihira's Bṛhat Saṃhitā*, ed. and tr., M. Ramakrishna Bhat, pt. I, Introd., p. xi, attributes AD 505 to the author in a general manner. See A.M. Shastri, *India as Seen in the Bṛhatsaṃhitā of Varāhamihira*, p. 16.

[9] A good discussion of the geographical data in Varāhamihira is to be found in A.M. Shastri, op. cit., ch. 2.

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Taxila,[10] Mathura,[11] Ujjayinī,[12] Kāśi,[13] Girivraja or Rajgir, and Tāmralipti[14] will be either destroyed or fall on evil days. Prophecies are also made regarding the destruction of Tripura[15] (identical with Tripurī or Tewar in Madhya Pradesh) and of Vanavāsi[16] in Karnataka. Mithila[17] and Siṃhapura[18] were assigned the same destiny. On the basis of Vālmiki's *Rāmāyaṇa* Mithila is identical with Janakpur,[19] now located in the *terai* of Nepal. But we have no archaeological information about this city which was called Videhanagarī. The prophecy of Varāhamihira suggests that it decayed after Gupta times, as is the case with most early historic towns situated in the plains close to the Himalayan foothills. In a late Jain text *Vividhakalpa Sūtra* Mithila is described as a Jain place of pilgrimage *(tīrtha),*[20] just as several other towns in decline became places of religious importance. Siṃhapura is identified either with a town in Saurashtra or with one located at a distance of eighty-five miles towards Kashmir.[21] But since residents of Siṃhapura are docketed with Ābhīras, Daradas and Barbaras, the town was possibly situated in western India.

Varāhamihira also states that the people of Gonarda will be afflicted.[22] Gonarda was situated between Ujjayinī and Vidisha.[23] Further, the astrologer predicts the destruction of the city of Alakā,[24] which though romanticized by Kālidāsa, may have been situated on the bank of the Alakananda.[25] In any case in the course of his predictions Varāhamihira speaks of the destruction or affliction of many towns; this process certainly struck his imagination forcefully. The end of Prayaga and Avanti (presumably identical with Ujjain) is apparently prophesied.[26] Destruction of towns and cities including that of capital cities is predicted in various contexts. It is stated that if mares, camels, buffaloes, cows and cow-elephants give birth to freaks or twins, unless they are separated from their herd and moved to other countries, they will destroy their own herds, owners and towns.[27] We also hear of the destruction of the capital or cities if the sun appears in the form of an arch.[28]

[10] *Bṛhat Saṃhitā*, X. 8. [11] Ibid., IV. 26. [12] Ibid., X. 15, cf. XI. 56.
[13] Ibid., V. 72. [14] Ibid., X. 14. [15] Ibid., V. 39.
[16] *puṇḍra-āparāntya-śūlika-vanavāsi-draviḍa-sāmudrān*. Ibid., IX. 15. The term *vanavāsi* is rendered as forest dweller by M.R. Bhat (op. cit., p. 103), but it really stands for the Kadamba capital.
[17] Ibid., X. 14. [18] Ibid., V. 42. [19] Ibid., I. 48-49.
[20] V.K. Mathur, *Aitihāsik Sthānāvalī* (in Hindi), pp. 745-46. [21] Ibid., p. 963.
[22] *Bṛhat Saṃhitā*, IX. 13. [23] A.M. Shastri, op cit., p. 109.
[24] *Bṛhat Saṃhitā*, XI. 58. [25] V.K. Mathur, op. cit., pp. 41-42.
[26] *Bṛhat Saṃhitā*, XI. 35.
[27] *Bṛhat Saṃhitā*, XLVI, 53-55. *nagaraṃ svāminaṃ yutham anyathā tu vināśayet ...*
[28] Ibid., III. 31, cf. XLVI. 7.

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Several forecasts refer to the seize and destruction of capital cities. If Agastya is tiny he causes the seize of the city (*pura-rodha*).[29] When a planet called Paura is overpowered by another of the same description, kings defending their towns would kill others in the same situation.[30] A halo observed in the first four lunar days of a fortnight destroys brāhmaṇas, kṣatriyas, vaiśyas and śūdras, if observed on the fifth-seventh days it destroys trade guilds, towns and royal treasure (*śreṇī-pura-kośānām*); on the ninth, tenth and eleventh days it harms the king; on the twelfth it causes a town to be beseiged; on the thirteenth it leads to a mutiny in the army; on the fourteenth it causes danger to the queen and, on the fifteenth, to the monarch himself.[31] These passages concern political upheavals, particularly the revolt in the soldiery, leading to the fall of the city and its ruler. Whatever might be the cause several prognastications concern the destruction of cities/towns and their inhabitants. The *Bṛhat Saṃhitā* also predicts the ruin of those who lived on the banks of the Indus,[32] Yamuna,[33] Sarayu, Son,[34] Kaveri and Narmada.[35] Although classical towns were generally situated on river banks, the prophecy might include many rural settlements as well.

Some general prophecies suggest the destruction of the townspeople. For instance, at sunrise a thunder marked by the harsh cries of birds facing the sun destroys judges or administrators, kings, wealthy persons, warriors, women, traders and courtesans. In the first watch of the day it destroys goats, sheep, śūdras and city dwellers; in the second king's servants and brāhmaṇas; in the third, merchants and clouds; and in the fourth, thieves.[36] In this context we also hear of the destruction of vile persons, crops, groups of goblins, horses and elephants and of marching kings, but the lists of those (including city dwellers) who face destruction from the hurricane leave little doubt that most people affected by the hurricane were residents of capital cities.

In keeping with what he predicts about the fate of towns Varāhamihira repeatedly refers to bad days befalling artists, artisans and merchants. He does not specify whether these were townsmen, but other sources show that they conglomerated in towns. In connection with Mercury's (Budha) transit he states that merchants, physicians, sailors, water products such as pearls, conch-shells, etc., and horses will come to grief.[37] Reference to

[29] Ibid., XII. 20.

[30] Ibid., XVII. 8. *paure paureṇa hatē paurāḥ paurān nṛpān vinighnanti.*

[31] Ibid., XXXIV. 19-20. [32] Ibid., V. 66, 80. [33] Ibid., V. 37.

[34] Ibid., V. 65. [35] Ibid., V. 64.

[36] Ibid., XXXIX.2. *ark-odaye'adhikaraṇika-nṛpa-dhani-yodh-āṅganā vaṇig-veśyāḥ, āpraharāṃśe'j-āvikam-uphanyā-cchūdra-paurāṃśca.* Also see XXXIX. 3.

[37] Ibid., VII. 6.

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water products means that pearl and conch-shell industry, in which both artisans and merchants were engaged, suffered. Rāhu is held responsible for many evil influences. If his course causes an eclipse in the month of Caitra (March-April), it would affect Vedic scholars, painters, writers, musicians, prostitutes, gold dealers and people of Puṇḍra, Orissa, Kekaya and Aśmaka.[38] It is further stated that Saturn's movements will bring troubles to wanton women, writers, painters and painted vessels, bards, spies, couriers, charioteers or story-tellers, sailors, actors, musicians, etc.[39] We are told that certain movements of Saturn destroy not only horses, horsemen, poets, physicians and ministers but also dancers, actors, musicians, singers, instrumentalists, the wicked and hunters.[40] Victims in these lists comprises various types of entertainers and professionals who lived in towns. Varāhamihira frequently speaks of the evil days or destruction of artisans, who include dyers,[41] barbers, potters, tailors and elephant-catchers; according to him harlots and the people of Kosala[42] also face misfortunes. In the same manner brewers (*śauṇḍika*) and carriage makers are also affected.

If we analyse the list of humble employments and occupations prepared by S.K. Maity on the basis of the *Bṛhat Saṃhita*[43] and exclude cultivators, cowherds and shepherds from it, we find that Varāhamihira forbodes calamity for nearly two dozen occupations belonging to artisans. They include bleachers, distillers, painters, well diggers or miners, soldiers, physicians, grocers, actors, singers and dancers. Of course thieves, robbers, gamblers, and prostitutes are also enlisted. All those bedevilled by bad luck seem to be typical townspeople; the most affected ones are physicians who are frequently referred to.[44] If physicians suffer most it would certainly affect the health of the people. In contrast to the nearly two dozen artisans and others who face misfortune, only magicians, jugglers, singers, soldiers, perfumers, servants and thieves are promised prosperity.[45]

That industrial workers or craftsmen were adversely affected can be inferred from an examination of another list of Maity.[46] While there are

[38] Ibid., V. 74.

[39] Ibid., X. 10. *citrasthe pramadājana-lekhaka-citrajña-citrabhāṇḍāni, svatau magadha-caradūta-sūta-potaplava-naṭ-ādyāḥ.* The term *pramadājana* is rendered as women by M.R. Bhat, but it is better taken as wanton women.

[40] *Bṛhat Saṃhitā*, X. 3.

[41] Ibid. X. 5. The term *rajaka* is translated as both dyer and washerman by M.R. Bhat.

[42] Ibid. X. 9. *haste nāpita-cakrika-caura-bhiṣak-śucikā dvīpagrāhāḥ, bandhakyaḥ kauśalakā mālākārāśca pīdyante.*

[43] S.K. Maity, *Economic Life of Northern India in the Gupta Period (cir. AD 300-550)*, p. 195.

[44] Ibid. [45] Ibid. [46] Ibid., p. 193.

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eight forecasts of prosperity for oil-millers, carpenters and artisans in general, there are eleven forecasts of bad times for smiths, carpenters, distillers, and artisans in general.[47] It is significant that smiths who were engaged in various types of metallurgical work involving the production of ironware for home use and long-distance trade are shown in a bad plight. Thus the general trend deducible from the relevant prophecies is one of adversity for craftsmen, professionals and other townsmen.

That traders or merchants will be destroyed or face adversity appears in many passages. Again and again they are listed along with gamblers,[48] prostitutes[49] and physicians.[50] Sometimes the types of merchants, who meet destruction are specified, and the articles they trade are enumerated. It is stated that dealers in juices and such commodities as salt and jaggery will come to grief.[51] We are also told that a sojourn of Saturn will cause trouble to vaiśyas, gamblers, traders and warehouses.[52] Several verses predict destruction of traders (*sārthavāha*) and merchants (*vaṇik*) along with others.[53] Prophecies made in the *Bṛhat Saṃhitā* about industrial products, objects of merchandise, trade, traders and shopkeepers, and also those made about the market prices of staple goods, raw materials, foodgrains, finished goods and essential commodities,[54] suggest that mercantile pursuits suffered. At one place forecasts for abundance are made for gold and minerals,[55] but at other places shortage is predicted for gold, salt, oil, sugar, ghee, honey and acquatic products in general.[56] Of these gold would be used in jewellery or in large transactions, but oil and salt would be essential for day-to-day living. The short supply of these objects would reduce internal exchange to a minimum. References to rising prices suggest an impetus to merchants, but there are more allusions to fair and low prices.[57] Low prices[58] for corn would not benefit traders and merchants.

Furthermore, although some verses of the *Bṛhat Saṃhitā* predict profit for sellers of animals, ironware merchants, dealers in corn, roots, fruits, honey, ghee, wollen cloth, saffron, conch-shells, corals, pearls, gold, silver, weapons, etc., such references are not more than a dozen.[59] But references to damage to salt and jaggery, warehouses, traders, sellers of liquids, sailors and navigators and others, guilds of merchants, head merchants and merchants in general are about two dozen.[60] The balance sheet clearly shows mercantile loss. The prophecies of Varāhamihira abound in drought, disease, fires, famines, etc.[61] A very long list of natural calamities

[47] Ibid. [48] *Bṛhat Saṃhitā*, X. 6. [49] Ibid., X. 8. [50] Ibid., V. 41, X. 17.
[51] Ibid., X. 8. [52] Ibid., X. 6-7. [53] Ibid., IV. 13, V. 40.
[54] S.K. Maity, op. cit., pp. 194-95. [55] Ibid., p. 193. [56] Ibid.
[57] Ibid., pp. 194-95. [58] Ibid., p. 195. [59] Ibid., p. 194. [60] Ibid.
[61] *Bṛhat Saṃhitā*, XI.

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is available, and they are mentioned at 146 places.[62] He foretells that farmers would face troubles although in the same breath he speaks of good crops and prosperity in the country.[63] M.R. Bhat, the editor and translator, attributes the adversity of farmers to fall in the prices of foodgrains,[64] but the real reason could be rise in taxes. Good crops and abundance of food frequently occur in predictions, particularly those relating to the movements of comets.[65] In all Maity has counted twenty-nine references to abundance of food in contrast to five of its scarcity.[66] Portents of prosperity and happiness of the people occur in thirty-six references and those which signal bad days in general appear in twenty-seven references.[67] These references seem to cover the people as a whole. But even here occasions for ill luck are outnumbered by those for good luck. Overall, it is highly significant that ill luck should be in store for artisans, merchants, professionals, trade and towns.

Varāhamihira generally predicts growth of crops in the chapter entitled *sasyajātakam*, wherein he also refers to their destruction or being infested with pest.[68] But, by and large, the *Bṛhat Saṃhitā* speaks of the decline of towns, trade and traders and also of crafts and craftsmen. S.K. Maity, who has made a thorough study of the evil influences resulting from the fortuous and pernicious combinations of stars and planets in this astrological text, finds "Varāhamihira's references to poverty, commercial failure, family ruin", etc., to be "so numerous" as to make the "economic condition of many people" in the Gupta period "very precarious".[69] The *Bṛhat Saṃhitā* therefore broadly confirms the archaeological evidence on urban decline in Gupta times. Significantly enough the text foretells the fall of the Śivis, Yaudheyas and Ārjunāyanas[70] but not that of the Guptas. Since its prophecies regarding the end of those tribal/oligarchical states reflect realities, its prophetic references to urban decline could not have been far from actualities in the fifth and sixth centuries.

The *Kāvyas* are more concerned with court life, and hence do not reflect the widespread decay of towns. Nevertheless a few literary texts contain faint echoes. Vālmiki's description of Ayodhyā when Rāma left for exile gives clear hints about the condition of a deserted town. Apart from the absence of the din and bustle of a busy life, we find that carts and chariots do not ply in the streets, sacrifices are not performed, and commodities are not adorned with flowers and garlands to attract customers. The shops are devoid of merchants, who feel worried on account of the end of their trade.[71] We learn that very few shops and markets are open, and the

[62] S.K. Maity, op. cit., p. 197. [63] *Bṛhat Saṃhitā*, IV. 9. [64] Ibid., pt., I, p. 35.
[65] Ibid., XI; also see pp. 146-151. [66] S.K. Maity, op. cit., p. 196. [67] Ibid.
[68] *Bṛhat Saṃhitā*, XLI. [69] S.K. Maity, op. cit., p. 190. [70] *Bṛhat Saṃhitā*, XI. 59.
[71] *Rām.* Ayodhyākāṇḍa, ch. 71, 19-43.

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merchants do not know what to do.[72] Ayodhyā faces a similar plight in the *Raghuvaṃśa*, after the death of Rāma. Its roads and streets, palaces and water tanks, and gardens and orchards are deserted, and the town goddess bemoans her fate.[73] The *Raghuvaṃśa* belongs to Gupta times although the *Rāmāyaṇa* could be of an earlier period. However the description of a prosperous Ujjayinī by Kālidāsa is not matched by material remains.[74] The *Vāyu Purāṇa* refers to a curse which made Varanasi desolate.[75] Again, the *Bhavisayattakahā*, a work of the ninth century,[76] describes a town which is rich but deserted.[77] These bits of information do not add up to much, but the archaeological evidence backed by foreign accounts clearly demonstrate de-urbanization in Gupta and post-Gupta times. Naturally a case for third urbanization has been made out.[78] Speaking of the age of Imperial Kanauj (from the beginning of the eighth century to the end of the tenth century), U.N. Ghoshal rightly holds that because of the preponderance of the rural element in Indian life the literature of the period does not make any special reference to the type of the city-bred man of fashion (*nāgaraka*), so well described in the *Kāmasūtra* of Vātsyāyana; on the contrary the *Kuṭṭanīmatam* of Dāmodaragupta (seventh century) provides a remarkably full and vivid picture of a typical country squire.[79]

The *Niśītha Cūrṇi*, a Jain commentary of the seventh century in Prākrit,[80] mentions several towns.[81] But those located in the east, north and north-west appear in ancient stories or legends; only towns in the west and Deccan belong to the seventh century.[82]

The two eighth-century Prākrit texts *Samarāiccha Kahā* by Haribhadra Suri and *Kuvalayamālā* by Udyotana Suri,[83] refer to towns and overseas trade.[84] But their value becomes suspect for several reasons. Their thematic strata have not been fixed. What they really seem to convey in the eighth century may refer to earlier times. According to Winternitz more than the

[72] Ibid., 114-13.

[73] *Raghuvaṃśa*, XVI, 9-23.

[74] Niharranjan Ray, *AI*, nos. 18-19, 1962-63, p. 227.

[75] D.R. Patil, *Cultural History from the Vāyu Purāṇa*, pp. 329-30. The curse was given by Nikumbha, an attendant of Śiva.

[76] C.D. Dalal and P.D. Gune, ed., *Bhavisayattakahā by Dhanapāla*, p. 3. J. Jolly suggests tenth century, but the argument of Muni Jinavijayaji suggests ninth century.

[77] *Bhavisyattakahā*, IV. 8.

[78] B.D. Chattopadhyaya, "Urban Centres in Early Medieval India: An Overview", *Situating Indian History: For Sarvepalli Gopal*.

[79] *HCIP*, IV, p. 382.

[80] Madhu Sen, *A Cultural Study of the Niśītha Cūrṇi*, pp. 8-9.

[81] Ibid., Appendix B.

[82] Ibid., pp. 10-11.

[83] M. Winternitz, *A History of Indian Literature*, II, p. 479, fn. 1.

[84] Jhinakoo Yadav, *Samarāicchakahā Ek Sāmskṛtik Adhyayan* (in Hindi), pp. 19-35, 167-71; Jagdishchandra Jain, *Prakrit Sāhitya Kā Itihās* (in Hindi), pp. 362-66, 371-73. Also see V.S. Agrawala, "A Cultural Note on the *Kuvalayamālā*" in *Kuvalayamālā*, A.N. Upadhye, ed., pt. 2, pp. 115-24.

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Buddhists the Jains took pains to appropriate to themselves all the favourite popular themes from brahmanical and general Indian literature.[85] He adds that Haribhadra, the author of the *Samarāicca Kahā*, took the main theme from earlier sources.[86] The author of the *Kuvalayamālā* also heavily borrowed from earlier sources. We find that many names of towns and foreign countries mentioned in this text were really current and important in earlier times. The inclusion of Ayodhya, which looms so large in it,[87] can be explained only on the basis of its old glory, for it had lost its importance in the eighth century. Ratnadvīpa (somewhere in South-East Asia) and Suvarṇadvīpa (Sumatra), which appear as places of sea voyage for trade in the *Vasudevahiṇḍi* of about the sixth century or of an even earlier date,[88] find place in the *Bṛhatkathāśloka Saṃgraha*.[89] In fact the *Vasudevahiṇḍi* is the earliest expanded Jain version of the *Bṛhatkathā* of Guṇādhya,[90] a work of the second-third centuries. Sea voyages to Ratnadvīpa and Suvarṇadvīpa are mentioned not only in the *Samarāicca Kahā* but also in the *Bṛhatkathā Koṣa* of Hariṣena,[91] which could be a Sanskrit text of the eleventh century.[92] Though the stories of voyages to distant lands including Siṃhaladvīpa, Kaṭāhadvīpa, etc., are repeated in texts the archaeological evidence for trade with South-East Asia between the fourth and the tenth century is very weak.

Taxila, Śrāvastī, Ayodhya, Pāṭaliputra, Ujjayinī and Pratiṣṭhāna or Paithan appear as important towns in the *Kuvalayamālā*.[93] In addition to these Champa, Mithila, Kauśāmbī Śrāvastī, Hastināpura and Bairat appear as important towns in the *Samarāicca Kahā*,[94] but leaving aside Mithila, which cannot be identified and appears as a town in the *Rāmāyaṇa* of Vālmiki, archaeological and other sources show that these towns were in a state of decay in the eighth century. In the *Samarāicca Kahā* some towns are called city states,[95] which label could fit those towns that issued coins between 200 BC and AD 200. No town did this in the eighth century or in the following two centuries. Nor is there any other indication to show that city states existed in the early medieval period.

The term *suvanna* used by Haribhadra Suri[96] recalls the prevalence of gold

[85] Winternitz, op. cit, p. 486. [86] Ibid., p. 523. [87] *Kuvalayamālā*, pt. I, p. 199.
[88] Jagdishchandra Jain, op. cit., p. 329. [89] Ibid., p. 335. [90] Ibid., pp. 328-29.
[91] Jhinakoo Yadav, op. cit., p. 168. [92] cf. Jagdishchandra Jain, op. cit., p. 332.
[93] Jagdishchandra Jain, op. cit., pp. 362-66, 373; *Kuvalayamālā*, pt. I, p. 199. (descriptions) of Ayodhya); pt. 2, Introd., pp. 54, 57.
[94] Jhinakoo Yadav, op. cit., pp. 19-34.
[95] Altogether forty-four towns are described in *Kuvalayamālā*. Prem Suman Jain, *Kuvalayamālā Kā Sāṃskṛtik Adhyayan* (in Hindi), pp. 62-74. But their descriptions are based on ancient traditions.
[96] Ibid., p. 161.

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coins in Kuṣāṇa and Gupta times, for finds of gold coins belonging to 600-1000 are almost absent. The term *dināra* used at several places in the *Samarāicca Kahā*[97] does not occur in contemporary inscriptions from Rajasthan, but in other areas it is found in Gupta period inscriptions.[98] Similarly the term *kārṣāpaṇa* in the same text commonly occurs in early historical sources but not in the records of early medieval India.[99]

It seems that the Jain texts of the eighth century recall in some ways the same kind of mercantile milieu as is found in the Buddhist *avadāna* texts of the third-fourth centuries. This is not to argue that all trade stopped in the eighth century. Of course some trade went on in costly, prestigious, luxury goods, meant for the use of chiefs, princes, and heads of *maṭhas*, temples, monasteries, etc. Trade in ivory, precious stones, and, above all, in horse[100] seems to have been important. But evidence for concentration of handicrafts in non-agriculturist settlements is meagre in Jain texts. None the less the Jain texts of the eighth century throw light on the emerging feudal polity[101] and the growing importance of the pilgrimages (*tīrthas*),[102] which were coming up in many old towns.

Several texts on architecture, compiled around 1000 or after give less importance to towns and far more importance to villages. This is true of the *Mayamata*, which devotes ninety-four verses to the layout of the town and 130 verses to the layout of the village.[103] This disproportion is magnified in the *Mānasāra*, which, though compiled around the fifteenth/sixteenth century, contains material of the seventh-eighth centuries. The traits of a village or *grāmalakṣaṇa* discussed in chapter 9 of the *Mānasāra* account for 269 verses in contrast to the layout of the town or the *nagaravidhāna* (chapter 10) which contains only fifty-eight verses.[104] But as shown earlier, the distinction between the village and the town is not sharp. Fort seems to dominate the scene. Provision is made for the fortification of several types of villages.[105] The *nagaravidhāna* specifies only

[97] Ibid., p. 162.

[98] B.D. Chattopadhyaya, "Markets and Merchants in Early Medieval Rajasthan", *Social Science Probings*, II, 1985, 414. However the term *dīnār* is mentioned in the *Lokaprakāśa* of Kṣemendra and in Kalhaṇa's *Rājataraṅgiṇī*. In the latter it denotes coins of gold, silver and copper.

[99] Ibid., p. 414, fn. 5.

[100] Chitralekha Gupta, "Horse Trade in North India: Some Reflections on Socio-Economic Life", *Journal of Ancient Indian History*, XIV, 1983-84, pp. 186-206.

[101] Jagdishchandra Jain, op. cit., p. 372; Jhinakoo Yadav, op. cit., pp. 53-56.

[102] Jagdishchandra Jain, op. cit., p. 373.

[103] *Mayamata*, Première Partie, Édition Critique, Traduction et Notes, Bruno Dagens, Pondichèry, 1970, Introd., p. 4; also see chs. 9 and 10.

[104] The *nagaravidhāna* is also called *nagaralakṣaṇa* (X.1) and *nagaravinyāsalakṣaṇa* (X. 55).

[105] *Mānasāra*, IX. 71.

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eight types of towns,[106] but the various types of forts (*durga*) taken together number sixteen.[107] However commercial cities are also walled,[108] and even some forts contain shops and merchants.

Significantly enough, *nagara* assumes a primarily political character in the *Mānasāra*. It is to be founded by the king, and its size varies according to the rank of the king/prince because it is primarily his residence and seat of power. On this basis as many as nine grades of kings are arranged in hierarchical order. Arranged in the ascending order they are: *i*) *astragrāhin*, *ii*) *prahāraka*, *iii*) *paṭṭabhāj*, *iv*) *maṇḍaleśa*, *v*) *paṭṭadhara*, *vi*) *pārṣṇika*, *vii*) *narendra*, *viii*) *mahārāja*, and *ix*) *cakravartin*.[109] A *nagara* is graded by the rank of the prince or the vassal who resides in it and not by the extent of its artisanal and commercial activities. All this suggests a new phenomenon in which military and political dimensions overshadow the artisanal and commercial aspects of the town.

The rise of the *skandhāvāra*, which is frequently mentioned in the land charters of the early medieval epoch, is also a new phenomenon. This settlement did not have the same character as the early historic town. A *skandhāvarā* is defined in the *Mānasāra* as a place which is located close to a river and is furnished with gardens, royal edifices and many riverside residential houses.[110] This obviously refers to a seat of power with permanent structure, and the definition will not cover improvised victory military camps which appear as *skandhāvāra* in many inscriptions. In addition to the *skandhāvāra*, various other types of non-agriculturist settlements such as forts (*durga*) and towns (*nagara*) are defined in the *Mānasāra*[111] but most definitions ignore artisanal and commercial elements.

Hsüan Tsang refers to cities in which streets were lined with shops; butchers, fishermen, dancers, executioners, scavengers, etc., lived outside the city in its suburbs. He also speaks of the walls and inner gates of the villages.[112] But the overall impression left by his account is one of decline, particularly of towns in northern India. We have referred to his observations which corroborate the state of decline revealed by excavations at numerous urban centres associated with Buddhism. All the 'Buddhist' towns situated not far away from the foothills of the Himalayas were found to be in a deserted state by him. Śrāvastī, Kapilavastu, Rāmagrāma,

[106] P.K. Acharya considers *rājadhānī*, *nagara*, *pura*, *nagarī*, *kheṭa*, *kharvaṭa*, *kubjaka*, and *paṭtana* as eight classes of towns. *Architecture of Mānasāra*, Preface, p. xxvi. These are discussed in X. 19-21.

[107] *śibira*, *vahinīmukha*, *sthānīya*, *droṇaka*, *saṃviddha* or *varddhaka*, *kolaka*, *nigama* and *skandhāvāra* are the main eight types of forts. Ibid., Preface, p. xxvi. Also see X. 21-53.

[108] Ibid., X. 19-21. [109] Ibid., X. 1-31.

[110] *Mānasāra*, X. 43. *nadyādikananopetaṃ bahutīra janālayam*, *rājamandirasaṃyuktaṃ skandhāvāramudāhṛtam*.

[111] Ibid., X. [112] *Si-Yu-Ki*, I, pp. 73-74.

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and Kuśīnagara come under this category. Archaeological information has been provided about all the towns except Rāmagrāma. Hsüan Tsang states that the kingdom of Rāmagrāma has been waste and desolate for many years, and that its towns are decayed and the inhabitants few.[113] This territory lay not far from Kapilavastu, and was separated from the kingdom of the Śākyas by the Rohiṇī river. Similarly the observations of Hsüan Tsang clearly imply the decline of Gaya, which was an important ancient city. He states: "This town is naturally strong (crags and precipices). It has but few inhabitants; there are about 1000 families of Brāhmaṇs only..."[114] However the habitation area of the ancient town needs to be properly identified and excavated.

In the upper Doab Hsüan Tsang speaks of a region called Srughna. Located 400 *li* north-east of Thanesar, it was bounded on the east by the river Ganga and on the north by high mountains.[115] Hsüan Tsang states that the capital, about 20 *li* in circuit, lay on the western side of the river Yamuna and was in ruins.[116] The ruins of the town at Sugh near Jagadhari in Haryana have been identified with the ancient city of Srughna. The limited excavations here in early sixties revealed that the city had declined around AD 300. Overall, the account of Hsüan Tsang shows that in the seventh century towns in north India were declining.

The Arab geographers of the ninth-tenth and subsequent centuries, who were more familiar with western India, refer to towns in that part but point out their fewness in the country as a whole. Merchant Sulaiman (AD 851) states that the greater part of India is without towns though large and fortified towns are found in every part of China.[117] Ibn al Fakih Hamdani, who compiled his book *Kitabul Buldan* in AH 903 (AD 1497-98), notes that unlike China, which has large towns, India does not have towns.[118] He adds that China is a more populated country and its towns are large and well preserved.[119] These observations might be exaggerated, but taken along with those of Hsüan Tsang and Al-biruni they broadly corroborate the decay and disappearance of towns as disclosed by the archaeological evidence.

[113] Ibid., II, p. 26.

[114] Ibid., II, p. 113.

[115] Watters, *On Yuan Chwang's Travels*, I, p. 137.

[116] Ibid., p. 318. Five *li* make one mile.

[117] Ferrand, *Relations des Voyages et Texts Geographiques Arabes, Persans et Turko — Relatifs a l'Extreme — Orient du Ville au XVIIIe siecles*, 2 vols. Paris, 1913-14, 63 n. Quoted in *History and Culture of the Indian People*, ed. R.C. Majumdar, IV, p. 397, fn. 167.

[118] K.A. Fariq, *Arab Literature Men Kadim Hindustan* (in Urdu), p. 23. I owe this reference to Dr. H.C. Verma. The text entitled *Kitab* was edited by de Goeje, Leyden, 1885.

[119] Muinuddin Ahmad Nadir, *Hindustan Arabon Ki Nazar Men*, I, pp. 156-58. From an abridged edition of the text we learn that the cities in India are wider and those in China are populous. This text entitled *Mukhtasar Kitabul Buldan* (Leiden, AH, 1302) has been kindly consulted for me by Professor Qeyamuddin Ahmad.

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By comparing Al-biruni's list of towns in northern and western India with that of Kuṣāṇa and pre-Kuṣāṇa towns, K.A. Asharfyan points out that the transition from antiquity to the Middle Ages was marked by the disappearance of many ancient towns. Those which survived suffered decline and underwent a gradual transformation of their socio-economic structure.[120] Asharfyan identifies twenty-two important pre-Kuṣāṇa towns, which cover not only northern India but also parts of central and western India according to our scheme. These are (in the alphabetical order):

> Ayodhya, Bharhut, Bodh Gaya, Hastināpura, Indraprastha, Kapilavastu, Kapiśā, Kauśāmbī, Kuśīnārā, Lampaka, Mathura, Pāṭala, Pāṭaliputra, Rajagṛha, Sanchi, Sarnath, Śrāvastī, Taxila, Tāmralipti, Ujjayinī, Vaishali and Varanasi.

The list includes three towns, Lampaka, Pāṭala and Taxila, falling within the territorial limits of Pakistan which has not been considered in our study. On the other hand some other important towns such as Champa, Eraṇa, Sringaverapur, Vidisha (Besnagar) can be added to this list, thus making it twenty-six. Out of these, only five towns, namely Ayodhya, Mathura, Pāṭaliputra, Ujjain, and Varanasi appear in Al-biruni's text.[121] Most of these existed as religious centres, which, as will be shown later, developed when towns lost their urban character. Thus the process of the decline and disappearance of ancient towns is very clear.

Ashrafyan accepts the view that Ahicchatrā, Bharukaccha, Champa, Daśapura, Kānyakubja or Kanauj, Padmāvatī, Prayaga, Purushapura, Śākala, and Valabhi appeared as towns in the Kuṣāṇa-Gupta period.[122] But half of these were really pre-Kuṣāṇa towns. Whatever be their date of origin, Ahicchatrā, Daśapura, Padmāvatī, and Śākala are not mentioned in *Al-beruni's India*.[123] According to Asharfyan a study of the list of Al-biruni's

[120] "The Ancient and Medieval Towns of India: The Problem of Continuity", Paper submitted to the Symposium on Transition from Ancient to Medieval Periods held under the auspices of the Indian Council of Historical Research, New Delhi, 1985, unpublished. Ashrafyan has also published a book *Medieval Towns of India*, Moscow, 1983, but I have not consulted this book.

[121] *Alberuni's India*, Edward C. Sachau, ed., London, 1914, vol. I, pp. 198-206. Al-biruni uses the terms 'town', 'city', 'fortress' or 'capital' in several cases. He also uses the term 'village' to describe some places. But while mentioning places occurring on routes from Kanauj to the east, south-east, south-west, north-northwest, and west he does not specify their identity. For instance, Khajuraho is called both town and capital, Gwalior and Kalanjar are called fortresses (I, p. 202). Several places including the town Bihat lying on the eastward route from Kanauj cannot be identified. Kanauj and Thanesar seem to be two important towns (I, p. 199).

[122] This view was advanced by V. Zunderman at the International Conference on Kushans at Dushanbe in 1969.

[123] K.A. Ashrafyan, op. cit.

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northern towns known from ancient Indian sources shows that ancient towns had either disappeared or were in a state of decline.[124]

It will be seen that Indian literary evidence for urban decline in Gupta and post-Gupta times is not strong. Naturally those obsessed with the glories of ancient India or the unchanging character of its socio-economic pattern may harp on this point. But indigenous literature is mainly courtly in nature, and as such its authors do not show much awareness of social and economic changes. An important event such as Alexander's invasion is not noticed by Indian writers, but that does not minimise its historicity. On the other hand indigenous texts are not totally bereft of references to urban decline. What is far more important, inscriptions and foreign accounts broadly corroborate the decline indicated by excavations.



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7

Nature of Early Medieval Monastic Settlements

Material remains of early medieval levels, when compared with those from early historic layers, appear to be generally non-urban in character. We can easily make these comparisons at those sites which continue to be occupied beyond the sixth century. Phases of material culture at the same site are not difficult to compare. But material remains of old urban sites can also be compared with those from large settlements founded in Gupta and post-Gupta times at new spots. The signs of desertion and diminution of towns can be identified archaeologically. If congested constructions with streets, drains, tools, refined pottery, sophisticated and small-sized terracottas, granaries, varied artefacts, coins, coin moulds, etc., indicate urbanism, their paucity or absence can legitimately be regarded as a symptom of its decay.

The lack of urban elements in Gupta levels has been shown earlier at numerous sites. Here we may consider the nature of material remains found in early medieval Buddhist monasteries on which we have better information from excavations. Buddhist establishments with stupas, temples and, above all, monasteries found in Bangladesh, Bihar, Orissa and eastern Uttar Pradesh show constructions with drains, streets, etc., in Gupta and post-Gupta times,[1] which suggests some density of population, particularly of monks, their attendants and devotees. A similar type of population comprising priests, their servants and various temporary and permanent votaries lived in south Indian temples; this is indicated more by inscriptions than by archaeology. But whether the religious population was involved in economic activity typical of urban centres needs investigation.

Generally the monastic complexes of early medieval times seem to be shorn of the urban relics which characterized early historic sites. Some idea can be had from the remains of Pāla times excavated at Taradih near Bodh Gaya. Its monastic structures include walls, floors and covered drain, though tiles have not been discovered so far. The levels do not show any diagnostic or sophisticated pottery. Coins and coin moulds are totally absent. Equally absent are the seals signifying lack of artisanal and commercial activities. Neither glass nor ivory objects have been found.

[1] A good account of Buddhist structure is found in Debala Mitra, *Buddhist Monuments*.

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Considering the area that has been dug, semiprecious beads including those of agate, crystal and carnelian that have been discovered are not many in number. Jewellery is also absent. Balls and beads of terracotta have been found, but the finer terracotta pieces of earlier times are wanting.

Taradih is noted for the discovery of a copper mirror, but, except for constructions, relics of artisanal activity are poor. The outlying part of the mound shows traces of the use of the pounder (*dheṅkī*) for separating chaff from the boiled paddy grain.[2] Near by lies a long rectangular oven which could have been used for boiling the paddy. Paddy was received either in offer or collected from the peasants who cultivated the land given in grant. Evidently it was made into rice by women workers attached to the monastic establishments. All in all, the Pāla monastic complex at Taradih cannot be called urban.

Since we have identified certain diagnostic marks of urbanization, we may take them up one by one to see whether they apply to religious, non-agriculturist settlements of the early medieval period. We can start with the use of metal money. Coins have been unearthed at numerous sites, and constitute a striking mark of the urbanization of ancient Iron Age settlements. But, except for a few Pratīhāra coins[3] found in some early medieval layers, coins are almost absent in such layers at most sites. Religious structures may not be considered the right location for coins. But coins have been found in the stupa complex of Lauriya-Nandangarh in Champaran district; at this site a coin mould of the first century BC also appears. A coin mould has also been found at the monastic site of Dhulikatta in Andhra. Despite diggings for ten seasons extending over ten years at Antichak only two silver and seven copper coins were discovered in the monastic complex belonging to the ninth-twelfth centuries. They have been found in the upper layers, and the silver ones are not earlier than the eleventh century,[4] and the coppers may also be late. The coins found in the monastic complex of Ratnagiri near Cuttack are either Gaṅga or Tughlaq, i.e. not earlier than the thirteenth century although the complex appeared in the eighth century.[5] The scarcity of coins in *c.* 600-1000 appears in almost all parts of the subcontinent with a few exceptions in Kashmir, Punjab, western Uttar Pradesh and Rajasthan. As long as metal

[2] I owe all this information to Dr Sita Ram Roy and Naseem Akhtar who are associated with the excavation of Taradih along with A.K. Prasad.

[3] Pratīhāra coins appear in Ahar (*ASR, 1925-26*, p. 57). Of the five silver coins found there three may be attributed to one or another of the Vigrahapālas. They are roughly assigned to AD 900. (Ibid., pp. 57-58).

[4] Information from S.K. Chaudhary, who was associated with the excavation, cf. *IAR, 1975-76*, p. 7; *1978-79*, p. 43.

[5] Debala Mitra, *Ratnagiri*, I, pp. 28, 33, 52-53, 155.

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money was in considerable use, it was normally offered by devotees including artisans and merchants. Sometimes coins also seem to have been minted on monastery premises. When coins became scanty, cowrie shells, which were "the usual medium of exchange in the Pāla period", appear in plenty in some monasteries in eastern India,[6] although, in view of the far greater value and lasting character of the metal money, the role of the shell as the medium of exchange was bound to be marginal. Long-distance trade could not be carried on in cowries. The Arab records of the eleventh and twelfth centuries from Cairo make it clear that in India's trade with the Middle East all goods were valued in *dīnārs* and payments were made in the same currency.[7] "It was customary to pay for the products of the Orient in cash".[8] Therefore the general absence of coin moulds in layers ascribed to the early medieval period is significant. The presence of coin moulds in large numbers in early historic sites shows the existence of mint towns which were evidently absent in post-Gupta times. Early medieval sites do not yield seals containing coin devices. The last of such devices appear on the central Indian silver coins of Kumāra Gupta I and his successors, which would limit their adoption until the sixth century.[9] This may be taken as another indicator of the fewness of coins after the sixth century.

The paucity of coins in the post-Gupta period has been questioned.[10] But we see no reason to change our view that between 600 and 1000 gold coins were almost absent in India and that in contrast to the earlier period there was general dearth of metallic currency in post-Gupta times. "The attribution of the extensive Sassanian-type silver coins to known kings or dynasties, except the Ādi Varaha pieces, is virtually impossible."[11] These coins are generally found in north-western parts, though a few found in Antichak excavations belong to the eleventh-twelfth centuries. Much cannot be made of the minting of copper coins in Kashmir.[12] The latest review of the problem shows that the dearth of coins in the early medieval period cannot be wished away.[13] Several numismatists see the connection between

[6] *ASR, 1929-30*, p. 142.

[7] *Islamic Culture*, XXXVII, 1963, pp. 195-99, 195 fn. 10.

[8] Ibid., p. 199.

[9] K.K. Thaplyal, *Studies in Seals in Ancient India*, p. 5.

[10] D.C. Sircar, *Early Indian Numismatic and Epigraphical Studies* chs.3-7; J.S. Deyell, "Living Without Silver: Monetary History of Early Medieval India," unpublished Ph.D. thesis, University of Wisconsin, 1982.

[11] Bela Lahiri, "Complexities in the Study of Early Medieval Coins of Northern India", *JNSI*, XLII, 1980, p. 85.

[12] Y.B. Singh, "Copper Coins and Their Minting in Early Medieval Kashmir: A Problem", *JNSI*, XLIV, 1982, pp. 180-84.

[13] K.M. Shrimali, "Early Indian Coins and Economic History: Trends and Prospects", Typescript, Seminar on Recent Trends in the Study of Socio-Economic History of India, University of Jabalpur, 1986.

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coinage and flourishing trade, and attribute the scarcity of coins in the early medieval period to dwindling foreign trade.[14] The view that 'an urban anaemia' accompanied 'a monetary anaemia'[15] was true of the second half of the first millennium in India. Money was 'the symbol of urban prosperity'[16] and its shortage an indication of the disintegration of urban life. Old coins would be in circulation for some time, but they were very thinly spread over a larger area and population. Moreover the money inherited by the early medieval princes and landed magnates was squandered on arms and luxuries.

Numerous seals of early historic times, found in stratified layers at Bhita,[17] Varanasi[18] and Vaishali,[19] served not only religious and administrative purposes but also commercial purposes. They also contained coin devices. In general the number of seals seems to have declined in post-Gupta layers, though they are found in good numbers in several monastic establishments. For example nearly 1386 seals, excluding those of the *mahāvihāra*, have been unearthed from Ratnagiri *mahāvihāra*.[20] But these seals primarily served religious purposes. They probably contain the names of monks or lay devotees, and many of these were evidently offered by the pilgrims as mark of respect for the Buddhist deities and temples.[21] Some other seals, such as those from Nalanda, suggest transactions between this *mahāvihāra* and the villages that were granted to it for its maintenance, for the same seal carries the name of the great monastery as well as that of a village or district office.[22] Of course impressions of many royal seals appear on the copperplate charters recording land grants. Apart from being impressed on the copperplate land charters, seals of Harṣa, the Maukharis and the Sena kings have also been found. But as a rule in the centuries following the end of the Gupta period such seals as those of the corporate bodies of merchants, traders and artisans (*śreṣṭhi-sārthavāha-kulika-nigama*) do not appear.[23] Early medieval cities are not associated with seals of guilds/towns (*nigamas*)[24], which ceased to issue coins.

The higher material culture of the townsmen is attested by the use of the sophisticated types of pottery. Northern Black Polished ware was a glossy product meant for the use by higher classes, and so was red polished ware, noted for its thin section and fineness. Until the third century AD we notice

[14] Bela Lahiri, op. cit., p. 88; cf. Y.B. Singh, op. cit.

[15] Maurice Lombard quoted in Carl M. Cipolla, ed., *The Fontana Economic History of Europe: The Middle Ages*, p. 73.

[16] Jacques Le Goff in Cipolla, op. cit., p. 81. [17] *ASR, 1911-12*, pp. 44-45.

[18] A.K. Narain and T.N. Roy, *Report on Excavations at Rajghat*, pt. II, p. 14.

[19] *ASR, 1903-4*, pp. 88, 101, 104; *1913-14*, p. 99.

[20] Debala Mitra, *Ratnagiri*, II, p. 395. [21] Ibid. [22] K.K. Thaplyal, op. cit., p. 18.

[23] *ASR, 1903-4*, pp. 104, 110. [24] Ibid.

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not only the diagnostic pottery of a period but also new shapes in it. All this is tied with trade and urbanism. But the Gupta pottery is non-descript, and hardly shows any new distinct shape. The post-Gupta pottery including that of the Pālas falls in the same category. Metal ware could be a good substitute for sophisticated pottery, but this does not become important in Gupta and post-Gupta times. Hence the disappearance of fine pottery is a symptom of urban decline.

Ancient layers have yielded moulds of stone and terracotta for manufacturing ornaments of gold, silver and copper. Stone moulds have been recovered from Taxila and Kuṣāṇa levels at Sambhar.[25] Dies of copper, bronze, stone and ivory were used for the same purpose.[26] Many dies made of stone, bone and terracotta, possibly used by goldsmiths, come from Amreli, Besnagar, Devnimori, Rang Mahal, Taxila and Vadnagar from *c.* 200 BC-*c.*AD 300 levels.[27] But such dies and moulds have not been reported in any number from early medieval levels or sites. Moulds, sometimes with double frame, meant for turning out hollow beautiful terracottas, have been unearthed at many ancient sites. Moulds also appear in some early medieval sites, but they are meant for casting terracotta plaques. Ancient terracottas were smaller in size and were used as toys or objects of beauty and decoration, though they were also put to religious use. Even till Gupta times most of them were without plaques. Probably there was some trade in terracottas between important urban centres. This can be said on the basis of exact similarities between terracottas belonging to distant towns and also on the basis of standardization found in terracottas from Śuṅga to Gupta times. But large terracotta plaques found in medieval monasteries were put to religious use.[28] They were placed in the niches, which also contained numerous stuccos. In early medieval times the number of terracottas seems to have decreased, and their use was monopolized by religion, though they may have been used by kings and landed aristocrates to decorate their palaces on auspicious occasions.[29] Since the urban population consisting of the elite and lower classes had substantially declined there was not much demand for terracottas. There was no scope for specialized production for the market.[30] As in stone and bronze sculptures, regionalization also becomes important in terracotta.

In the first two centuries of the Christian era some crafts such as the

[25] C. Margabandhu, *Archaeology of the Sātavāhana Kshatrapa Times*, p. 325.

[26] Ibid. [27] Ibid.

[28] Cf. Devangana Desai, "Social Background of Ancient Indian Terracottas (cir. 600 BC–AD 600)", *History and Society, Essays in Honour of Professor Niharranjan Ray*, ed. Debiprasad Chattopadhyaya, pp. 161-64.

[29] Ibid., p. 164 [30] Ibid., pp. 163-64.

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making of stone beads, manufacture of shell objects and above all fabrication of ivory and glass goods reached its peak. Several towns, some in northern and others in peninsular parts, are called centres of these industries. India carried on trade in beads with some parts of South-East Asia in the early centuries of the Christian era.[31] Significantly enough, after the fourth century archaeological evidence for such trade is lacking. The production of glass goods dwindled in Gupta times and later. As a historian of Indian glass has noted, during the Gupta period "the glass industry in India had declined to such an extent that it would not be far wrong to estimate that glass was not valued and cared for".[32] He finds it "quite surprising that not a single artifact of glass has been found in the Gupta levels at Śrāvastī, Nalanda, Bhita, Kasia, etc..."[33]

It is likely that in ancient Indian towns ivory work was far more important than glass work. Ivory goods formed an important item in long-distance trade. The discovery of the Indian ivory statue in Pompeii is well known. This is compared to a similar statue found in Ter or Tagar. But it is far more important that along with Syrian glassware and Hellenistic bronzes, ivories of indisputable Indian origin were found in excavations at Begrām, the capital of ancient Kapiśā in Afghanistan.[34] They consist of six-hundred specimens mostly representing women figures.[35] They seem to have been part of a 'collection', which is called "the most astonishing yet discovered in our time" and considered the possession of some rich merchant who deposited them in the middle of the third century.[36] Ivories were made in a number of workshops, but they belong to the same period,[37] i.e., the second and third centuries.[38]

Only a few beads of semiprecious stones, and much lesser ivory and glass goods are found in early medieval deposits of Indian sites. Probably these objects were now being used by rural magnates, and by chiefs and others living in fortified settlements, but archaeology does not indicate concentration of skills and expertise, of craftsmen and merchants, at early medieval sites. It seems that the early medieval production system was marked by the dispersal of crafts and skills.

Some ancient urban settlements, particularly in central and peninsular India, were rich in the production of iron artefacts. It may be wrong to think that iron objects ceased to be produced in large numbers in subsequent

[31] H.B. Sarkar, *Cultural Relations between India and Southeast Asian Countries*, p. 248.

[32] M.G. Dikshit, *History of Indian Glass*, p. 69. cf. Infra, p. 128, fn. 39. [33] Ibid., p. 63.

[34] Jeannine Auboyer, "Ancient Indian Ivories from Begrām Afghanistan", *The Journal of the Indian Society of Oriental Art*, XVI, 1948, pp. 34-35.

[35] Ibid., p. 36. I saw many of these ivories in the Kabul Museum. [36] Ibid., p. 35.

[37] Ibid., p. 36, fn. 1.

[38] Ibid., p. 35.

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centuries, but they do not appear in numbers at one site.[39] We may presume wide dispersal of iron technology also. Crucibles, furnaces and iron slag, indicating the casting of iron tools in most cases, have been reported from many ancient sites in north India including Khairadih where it is quite impressive. Small crucibles used for melting metal occur in levels of *c.* 500 BC-*c.* AD 400 at Besnagar, Bhokardan, Devnimori, Maheshwar, Nasik, Navdatoli, Nevasa and Taxila. They are made of coarse and sandy clay in various shapes.[40] Although crucibles and furnaces occur in early medieval sites, their number is small and they are mostly connected with the manufacture of bronze Buddhist images.

Early medieval bronzes, found in excavations and explorations, excel the bronzes of the Bronze Age in quality. These from Nalanda, dating from the sixth to the twelfth century, show high technical and metallurgical knowledge.[41] Early medieval bronzes appear at monastic sites in eastern India and temple sites in south India.[42] They are so numerous[43] that in contrast to them bronze objects unearthed at early historic sites called towns are negligible. We do not find bronze tools, for their place was taken by iron tools, which substantially facilitated the production of bronze goods. But we find bronze utensils. and more importantly bronze images of Buddhist and brahmanical deities. Whether artisans and merchants were involved individually/collectively in the production of these bronzes is not clear. But there is no doubt about copper/bronze casting, as demonstrated by the presence of furnaces at Paharpur[44] and Nalanda.[45] Crucibles were found in Paharpur[46] and Antichak.[47] Two large crucibles and a small double oven were found at Ratnagiri, which produced some bronze, copper or brass.[48] Of course crucibles found in early medieval strata are fewer. Nevertheless they were set up in the precincts of the monasteries to mould Buddhist images.

How copper and tin were obtained by the monastic establishments is not clear. Copper could be procured from the Chota Nagpur plateau, but the evidence for the availability of tin in that area is not strong. In any case we have no idea about the agencies from which these metals were acquired. It seems that bronze-producing units did not operate under the control of secular parties involving artisans and merchants. Whether there was any

[39] Exceptions must be made in the case of Nalanda (*AI*, no.8, 1952, pp. 22-23) and Prakash where we have flourishing glass and metal crafts.

[40] C. Margabandhu, op. cit., pp. 324-25.

[41] *AI*, no 12, pp. 13-14.

[42] Ibid., *ASR, 1930-34*, pp. 302-303.

[43] Ibid.

[44] *ASR, 1930-31 to 1933-34*, p. 122.

[45] A. Ghosh, *A Guide to Nalanda*, p. 18.

[46] *ASR, 1930-31 to 1933-34*, p. 120.

[47] Outside the monastery complex shanty brick structures associated with ovens, pots, stone querns, pestles, etc., have been found. *IAR, 1977-78*, p. 14

[48] D. Mitra, *Ratnagiri*, II, pp. 271, 353.

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trade in bronze is not clear. Land grants provided for the monastery would suggest that artisans were attached to the monasteries and remunerated by them either in provisions or by grants of plots of land. Such grants were clearly provided for repair in which masons, bricklayers and other artisans were involved. Trade in bronzes in early medieval times is attested neither by inscriptions nor by literary texts, although we hear of dealers in horse, oil, salt and even in foodgrains in Karnal[49] and Gwalior[50] districts and in portions of Rajasthan and western Uttar Pradesh.[51]

Sculpture began in urban centres such as Taxila and Mathura around the first century AD. The first two centuries of the Christian era seem to be its real creative period. Gupta sculpture is less marked by originality and more by elaboration and refinement. The Gupta and the post-Gupta age is noted for numerous pieces of sculpture in black stone, red or buff sandstone, limestone, and other varieties of stone. But local styles in stone and bronze pieces show that these were not meant for circulation over a wider area. Stone sculptures associated with various sects of brahmanical, Jain and Buddhist religions seem to have been produced in the same manner as bronze pieces. Much depended on royal patronage extended to temples in which numerous icons were housed and sculptures worked out in relief. Bronze and stone pieces did not enjoy the status of modern 'antiques' which carry far more value than gold. Temple establishments may have kept a small number of permanent masons and sculptors for occasional repair and additions. But large-scale construction of structures and manufacture of images at the initial stage would certainly require massive royal patronage for mobilizing men and material.

During Gupta and post-Gupta times neither foreign coins nor pottery are substantial enough to prove close and continuous contact between Indian ports/cities on the one hand and foreign countries on the other. The presence of the rouletted ware in South-East Asia shows that the network of Roman trade covered both India and South-East Asia. A portion of the ware may have been manufactured as imitation ware in India. In early medieval times imitation of Indian deities occur in South-East Asia, but nothing is known about pottery so far. Contact with the west had become equally weak. A few Byzantine coins of the fourth-sixth centuries have been found at some Andhra Pradesh sites,[52] but in contrast with the Roman coins their number is marginal. In post-Gupta times even these small finds disappear.

A few Chinese coins have been reported from south India, but they

[49] *EI*, I, no. 23, pp. 1-17.

[50] *EI*, I, no. 20.

[51] R.S. Sharma, *Indian Feudalism*, pp. 102-109.

[52] *IAR, 1978-79*, p. 39. These (two) Byzantine coins found at Kudavelli in Mahbubnagar district were used as pendants and circulation money from time to time.

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generally belong to a period beyond AD 1000. Unlike the Roman coins, the Chinese coins were made of copper, and not of gold. A hoard of 1818 copper coins was found in Thanjavur, and this currency ranged from 585 to 1200.[53] Unfortunately we have no idea about the date-wise break-up of these coins. Another hoard contained only twenty copper coins some of which belonged to the ninth century and others went beyond the tenth century.[54] The third hoard consisting of 323 coins covered a long period. The earliest coins belonged to *c.* 142 BC, but some of them covered the period AD 621-1252.[55] But here also we have no idea about the chronological spread of these coins. It is all the more significant that gold coins did not occur. Hence on the basis of the Chinese coins much cannot be said about trade. The archaeological record suggests Roman contact as a reason for flourishing urbanism at many sites in the Deccan and south India; similar close trade contact with foreign countries is not indicated by early medieval antiquities. Apart from some Chinese copper coins found on the surface, the only evidence for such contact is the find of the celadon ware of Chinese origin in stratified layers. The celadon ware is usually placed in the ninth century or later. But at most places it is found in association with the glazed ware and sometimes with polychrome glass bangles which are attributed to the advent of the Muslim rule. In such cases the celadon ware cannot be earlier than the twelfth century.

A comparison of pre-third and post-third century material remains, found at Buddhist and other sites, provides indicators of de-urbanization, which appears in two phases, the first after the third and the second after the sixth century. Far more towns decayed in the first than in the second phase. The Gupta period appears as an age of transition in between the two phases, for in this period urbanism lingered at sites in eastern Uttar Pradesh and Bihar. Inscribed seals indicating artisanal and commercial activities in Gupta times are found at Bhita, Varanasi and Vaishali (especially at Vaishali), though structures at these sites are generally poorer than those found in the pre-Gupta period. Taken together with coins these seals indicate continued urban activity. But after the sixth century such activity either ceases or becomes minimal. This can be said on the basis of the paucity of coins, coin moulds, commercial seals and can also be inferred from the reduced use of objects of shell, ivory, glass and terracotta, which were produced in volume in ancient times. Even iron

[53] P.C. Bagchi, "Report on a New Hoard of Chinese Coins", *Sino-Indian Studies*, IV, 1953, pp. 194-96.

[54] "Chinese Coins from Tanjore", *SIS*, I, 1950, 60f.

[55] N. Sankara Narayan, "Three Hoards of Chinese Coins in Madras Government Museum", *JNSI*, XXXIII, 1971, pp. 61-68. I owe all these three references to Chinese coins to Professor K.M. Shrimali.

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artefacts are not found in very large numbers at a single site, although on the whole the use of iron became widespread and it came to be used for even non-utilitarian purposes. Bronzes were produced in volume, though for religious use.

At most early historic town sites excavations show decay or disappearance of structures. But newly founded centres of late Gupta and post-Gupta periods show much larger structures in the form of temples and monasteries. Structures, none the less, should be judged on the basis of function and not on the basis of size alone. However large the structures may have been, by themselves they cannot indicate urbanism. This phenomenon also seems to have been true of fortified settlements and big establishments of chiefs and landed beneficiaries at least up to 1000. Monumental buildings were not meant merely for residential purposes. They were constructed obviously to provide security for men of religion and administration and also to instil in the common people fear and respect for authority. They symbolized the power and prestige of the ruling class and their allies. They may have been built with forced labour (*viṣṭi* and *sarvapīḍā)* prevalent in different parts of the country. Therefore the implications of the erection of large structures should be considered in an overall context.

Although early medieval Hindu and Buddhist temples covered larger areas, these 'monumental' constructions did not house the same number of residents as could live in non-religious structures of the same size. Monasteries could accommodate a good number of monks, but since they did not keep families their number could not multiply. The nature of the economic activities which sustained temples and monasteries is far more important. Early medieval religious establishments neither show any artisanal activity meant for the market nor the concentration of skills, expertise and specializations. They depended on the agricultural surplus collected from the countryside, but urban functions cannot be inferred from their physical remains belonging to the period roughly from the sixth to the tenth century.

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8

Explaining the Urban Eclipse

Several archaeologists refer to the decline of ancient towns. The two papers written by Y.D. Sharma suggest that towns declined in Gupta and post-Gupta times. R.N. Mehta and S.N. Chowdhary note that "from many sites in western India, evidences of desertion of sites in the later part of the first millennium AD are accumulating".[1] C. Margabandhu points out that, excepting some portions of north-western and western India where the settlements continue to flourish, towns lose their importance in Gujarat, Rajasthan and Madhya Pradesh at the end of the Sātavāhana rule and broadly in *c.* AD 200-400.[2] In reports on sites in Maharashtra the fact of urban decay after the third century is recognized by several excavators.[3]

The urban decline has been attributed to the political factor. Towns fall, it is held, because the kingdoms fall. Thus the fall of the Sātavāhanas heavily damages the glory of their capital city of Pratiṣṭhāna.[4] A setback in the economy and prosperity of Bhokardan is ascribed to the same factor.[5] The decline of Nasik, reflected in the poverty of finds after the third century, is implicitly ascribed to the fall of the Sātavāhanas and Kṣatrapas. It is held that political chaos led to economic depression, and such towns as Nasik, Nevasa, Junnar, Ter, Kolhapur and Bhokardan lost their privileged position.[6]

T. Bloch suggests that the collapse of the imperial line of Gupta kings caused the ruin and desertion of Vaishali.[7] It is also held that the Muslim invasion removed the material vestiges of the dynasties which ruled between the third and the thirteenth century. The removal of the layers

[1] "Exploration of Historical Sites", *AI*, no. 9, 1953, pp. 116-69; Y.D. Sharma, "Remains of Early Historical Cities", *Archaeological Remains, Monuments and Museums*, pt. I; R.N. Mehta and S.N. Chowdhary, *Excavation at Dhatva*, p. 66.

[2] C. Margabandhu, *Archaeology of the Sātavāhana-Kshatrapa Times*, p. 30.

[3] S.B. Deo and R.S. Gupte, *Excavations at Bhokardan*, p. 216; M.G. Dikshit, *Kaundinyapura*, p. 27.

[4] S.B. Deo and R.S. Gupte, op. cit., p. 216. The idea also seems to recur in C. Margabandhu, op. cit., p. 30.

[5] S.B. Deo and R.S. Gupte, op. cit., pp. 212, 216.

[6] S.B. Deo, "Historical Archaeology: Review and Perspective", *Purātattva*, Bulletin of the Indian Archaeological Society, nos. 13-14, 1981-83, p. 88.

[7] *ASR, 1903-4*, p. 88.

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belonging to the periods of Vākāṭakas, Rāṣṭrakūṭas, etc., in Kauṇḍinyapura, is attributed to its Muslim[8] occupation. But there does not seem to be any basis for this communalist bias. K.C. Jain considers foreign invasions, particularly that of Muslims, to be a very important cause of the decay of cities and towns in Rajasthan,[9] but how can this apply to towns which declined in the third century or in the sixth century? Archaeology clearly attests the decay of a good many towns by the sixth and in the following centuries. But the Turkish invasions took place towards the end of the tenth and continued until the beginning of the thirteenth century when in 1206 the Delhi Sultanate was established. Thus the decay of towns cannot be ascribed to them. Further even those places which were invaded continued to be occupied. What is significant, the coming of the Turkish invaders in the eleventh and twelfth centuries coincided with a mild revival of coins, trade and urbanism in northern India.

R.N. Mehta and S.N. Chowdhary, who notice the desertion of sites in western India "in the later part of the first millennium", think that the reasons for the desertion are not very clear. They consider the struggle for supremacy between kingdoms to be a cause. But "whether this struggle or some natural causes affected the population requires much further work".[10] The causes of the decline and disappearance of urbanism in Gupta or post-Gupta times are difficult to identify. It could be argued that towns were destroyed by foreign invasions. But this cannot explain the general trend of decline and desertion in the third century and in the following four centuries. Excavations show that both in the north and the Deccan most towns were deserted or had become derelict in the third century or a little later. But no foreign invasion took place at this time. The Hūṇa invasion may have destroyed some towns in north India in the fifth century. Three such cases may be mentioned. Ajaram, which is situated about twelve km south-east of Hoshiarpur and which yielded many post-Maurya coins including those of Taxila, Indo-Greeks and Kuṣāṇas,[11] shows two layers of ash.[12] This is interpreted to mean that the city was burnt successively by the Hūṇas and Muslims.[13] Evidence of the Hūṇa ravages is also produced in excavations at Sanghol and Kauśāmbī, but other instances of this type are not forthcoming. Similarly in north India the destruction of all urbanism cannot be attributed to the Turkish Muslim invasions.

Nor do we know of any countrywide natural calamity either in the third or in the sixth-seventh centuries, although occasionally signs of burning

[8] M.G. Dikshit, *Kaundinyapura*, p. 27.

[9] K.C. Jain, *Cities and Towns in Rajasthan*, ch. 13.

[10] R.N. Mehta and S.N. Chowdhary, *Excavations at Dhatva*, p. 66.

[11] *IAR, 1969-70*, p. 31. [12] Ibid. [13] Ibid.

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appear in the excavated sites. Shifts in the course of rivers on which towns were situated can also be detected. The drying up of the Ghaggar or the old Sarasvatī is given as the main cause of the disappearance of Rang Mahal. Archaeological finds and some climatological features indicate that the Ghaggar did not carry water as a river after the middle of the sixth century AD. This led to shortage of food and people were forced to migrate to other places for livelihood. The *Vāmana Purāṇa*, compiled in Kurukshetra around the seventh century, states that several holy places once associated with big ponds felt helpless against the advancing dunes of sand.[14] The usual explanation of the end of individual towns on account of fire, famine or flood may apply in some cases. But the archaeological record does not show evidence of any occurrence that might affect several towns at the same time.

It could be argued that the fall of the Kuṣāṇa power in north India and that of the Sātavāhanas in the Deccan created a political vacuum and led to the fall of towns in or after the third century; the same consequences could have followed the fall of the Gupta power in the sixth century. This view would mean that towns were needed, set up, maintained and protected by powerful polities. The moment such polities were destroyed, towns were ruined. The role of political power in promoting urbanism cannot be denied. But excavations show that towns started thriving from 200 BC onwards in a period of political disintegration that followed the fall of the Maurya empire. Incidentally, the Bactrian Greeks, the Śakas, the Parthians and the Kuṣāṇas invaded the north-west India in the period from the second century BC to the first century BC. Political vacuum occurs in both pre-Gupta and post-Gupta periods, but the urban situation does not remain the same. Towns prosper during the first period and decay during the second. Certainly peace and security afforded by the political power are conducive to trade and commerce. More importantly, a strong state can effectively extract taxes and tributes with which the non-food producing ruling classes living in towns can be supported and commodities from artisans and merchants purchased. But the role of the state is not the only factor. No doubt the Guptas ruled over a much larger part of India than the Kuṣāṇas and Sātavāhanas, yet most towns in the Gupta empire had either disappeared or become derelict. On the other hand besides the Sātavāhanas, Kṣatrapas and Kuṣāṇas numerous other states existed in *c.* 200 BC-*c.* AD 300, and yet the multiplicity of states and the consequent disability to extract more surplus did not obstruct the upswing of urbanization. Inscribed coins, apparently meant for exchange of commodities, were issued by numerous 'tribes', towns, guilds and dynasties during this period. No other period in ancient history could boast of metal money in so many varieties and in such profuse quantities.

[14] V.S. Agrawal, *Vāmana Purāṇa: A Study*, pp. xvi, 9.

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The reasons for the decay of towns in the Gupta and the post-Gupta phase should be sought in the decline of long-distance trade. Crafts and commerce flourished in the Sātavāhana-Kuṣāṇa period, partly because the country traded with Central Asia and the eastern part of the Roman empire. We thus find an extensive exchange zone. Although such closely linked world developments as characterize capitalism from the sixteenth century onwards were absent in ancient times, socio-economic processes in the ancient world cannot be comprehended in isolation from one another. Developments in wider exchange areas were as important as those within narrow political boundaries. For example developments in Central Asia or the Roman empire sometimes produced the same impact on Indian society and economy as those in the subcontinent itself. Towns in Punjab and western Uttar Pradesh thrived because north-western India formed the core of the Kuṣāṇa power in the subcontinent. But with the fall of the Kuṣāṇa empire Central Asian ties were snapped. Many sites which lay on the Kuṣāṇa route between Mathura and Taxila seem to have been deserted in the third century AD after the end of the Kuṣāṇa power, which in its heyday extended from the middle Gangetic basin to the Oxus. The Śakas and Kuṣāṇas used two routes from the north-west frontier to the western sea coast. One route directly ran from the north to the south, connecting Taxila with the lower Indus basin. Except Taxila the sites situated on the route have not been considered in this survey, but we learn that the situation was not different in Pakistan where towns decayed after the third century.[15]

Although our study does not consider towns in north Afghanistan and the neighbouring areas of Tadjikistan and Ujbekistan in the USSR, all the latter three of which together constituted Bactria, we have a parallel situation in these areas also. In Central Asia numerous towns, which owed their prosperity to the busy traffic on the Silk Road and to Kuṣāṇa interest in irrigation and agriculture, rapidly declined after the end of the Kuṣāṇa power. Five Central Asian urban centres of about the first to fourth centuries became either villages or castles afterwards.[16] As the centre of the Gupta power lay in mid-India or Madhyadeśa and in the adjoining areas of Madhya Pradesh and western India, towns in these areas did not suffer marked decline. Pakistan and the Indian areas including Punjab and parts of western Uttar Pradesh, which formed the centre of the Kuṣāṇa power in the subcontinent, have yielded very few Gupta coins and inscriptions, which suggests that the Gupta connection with Central Asia was either very restricted or practically absent.

In post-Gupta times the position seems to have substantially changed on

[15] Information from Professor A.H. Dani.

[16] Information from the Soviet archaeologist Professor V. Masson.

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account of decline in India's exports and further stoppage of the supply of gold from Central Asia and the Roman empire, a process that had started with the end of the Kuṣāṇa empire. Whatever remained of the Gupta contact with Central Asia and western Asia was completely destroyed by the Hūṇa invasions in the fifth century. It is significant that no gold coins are found in India for about three hundred years or so. When they reappear around AD 1000 they compare very poorly with Kuṣāṇa and Gupta coins. During the early Middle Ages, the colonies of the pre-Turkish Muslims, who are called Tadjiks (Iranian), appeared in various parts of the country except Kashmir, but no Indian colonies are reported in Persia or Central Asia from this period, although we learn of Indian settlers in Alexandria in the early centuries of the Christian era.

That Rome carried on considerable trade with the Indian peninsula is attested by the finds of Roman coins, glasses, bullae and pottery. In Brahmagiri in Chitradrug district even a Roman bronze statue occurs. Roman coins occur at eight excavated sites, but the total number of finds including numerous surface ones consists of 129.[17] Bullae or lockets imitating portraits of Roman emperors and depicting animals on Roman coins have been recovered from five excavated sites. These clay imitations were used either as token coins or ornaments. Twenty-five excavated sites have yielded Roman pottery. Roman objects generally occur in Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu, and also in Gujarat and the coastal belt of Orissa and West Bengal. A sherd of rouletted ware is also attributed to Ayodhya, whose traders went to Tamluk, a port with Roman associations. Pliny's figures indicating the annual drain of gold from Rome works out at seven tonnes.[18] This is exaggerated, but there is little doubt about substantial quantities of goods imported from India by Rome. According to the geographer Strabo the trade with India had grown so much that in his time 120 ships set sail every year from the Red Sea port of Myos Hormos to India.[19] His complaint regarding the gold drain is justified not only by the finds of numerous Roman gold coins in India and Sri Lanka but also by the imperial interdict on the import of silk and cutlery from the east. A consequence of developments in Rome, it adversely affected India's long-distance trade. The division of the Roman empire into two by the beginning of the fourth century and its eventual fall radically reduced the long-distance trade passing through the ports of the peninsular India. Byzantine coins[20] of the fourth and fifth

[17] Manfied G. Raschkey, "Roman Coin Finds on the Indian Subcontinent: A Catalogue and Analysis", unpublished.

[18] Keith Hopkins, "Economic Growth and Towns in Classical Antiquity", *Towns in Societies*, ed. Philip Abrams and E.A. Wrigley, p. 50.

[19] Strabo II.5.12 quoted, ibid.

[20] About thirty thousand Byzantine copper coins were found in Sri Lanka. Information from Dr Roland Silva.

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centuries appear in the peninsula, which carried on trade with the Byzantium till the sixth century.[21] Archaeology shows that the economy of the eastern Roman empire suffered a shrinkage in the seventh-eighth centuries.[22]

Although India traded with the Byzantium in Gupta times, judging by the number of Byzantine coins found in south India it is wrongly assumed[23] that it flourished on the same scale as trade with the undivided Roman empire. In this trade silk formed an important item, and the Persians took it to the Byzantines not only from the Chinese but also from Indians. But by the middle of the sixth century the Byzantium had learnt the art of rearing silkworms on mulberry leaves[24] as a result of which India's trade with the empire suffered. Though trade with the Middle East revived towards the end of the eleventh century,[25] merchants from north Africa were predominant in the Indian trade.[26] Of 103 items sent from the Middle East to India the largest group included textiles and clothing,[27] but the value of all the imports was small.[28] Of seventy-seven items exported by India to the Middle East iron and steel formed an important commodity.[29]

The notion that south India kept up thriving commercial relations with South-East Asia in the period from the fourth to the tenth century cannot be sustained archaeologically. India carried on bead trade with South-East Asia in the early centuries of the Christian era, as is attested by the finds from Arikamedu or Virapatanam near Pondicherry and Oc Eo in Cambodia.[30] The presence of Romano-Indian rouletted ware in north-west Java shows that south India carried on trade with that part of Indonesia during the first two centuries AD. Stone impressed and red wash/slip pottery known in India in the second-fifth centuries is also well represented in north-west Java.[31] But the archaeological record on trade contact in the

[21] N.C. Ghosh and K. Ismail, "Two Foreign Gold Coins from Excavation at Kudavelli, District Mahabubnagar, Andhra Pradesh", *JNSI*, XLII, 1980, pp. 11-17.

[22] The view of Richard Hodges and David Whitehouse is quoted in *The Times Literary Supplement*, 6 July 1984, p. 758.

[23] A. Korotskaya, *The Role of City in the History of India* (in Hindi), p. 95.

[24] S.K. Maity, *Economic Life of Northern India in Gupta Period*, pp. 136-39; Richard Pankhurst, *An Introduction to the Economic History of Ethiopia*, pp. 46-47; R.S. Sharma, *Indian Feudalism*, pp. 54-55.

[25] This can be said on the basis of the Geniza records in Cairo. They mostly come from AD 1080-1160, with a mere sprinkling of documents from the years 1160-1240. *Islamic Culture*, XXXVII, 1963, p. 195.

[26] Ibid., p. 199. [27] Ibid., pp. 197-98. [28] Ibid., p. 198. [29] Ibid., p. 196.

[30] H.B. Sarkar, *Cultural Relations between India and Southeast Asian Countries*, p. 248.

[31] Michael J. Walker and S. Santoso, "Romano-Rouletted Pottery in Indonesia", *Puratattva*, no. 9, 1977-78, pp. 104-8.

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early medieval period is wanting. Generally articles involved in trade between India and South-East Asia between the fourth and the tenth centuries have not been found.[32]

The numismatic evidence is equally weak at both the ends. Though a few Gupta coins have been found in Java,[33] no South-East Asian coins appear in India. This is because both Burma and Cambodia did not develop their system of coinage until the sixteenth century.[34] We notice the presence of south Indian guilds in South-East Asia in the ninth to the thirteenth century,[35] but the major presence in the Southern Seas in the ninth and tenth centuries was that of the Arabs. Indian participation in South-East Asian trade between the ninth and thirteenth centuries was "less than inconsequential".[36] The fitful appearance of Chinese coins, all copper, in early medieval south India, does not indicate much trade.[37] Overall, after the third century and particularly after the mid-sixth century long-distance trade lost its vigour as a result of which towns suffered.

We may consider the possibility of the wearing away of the landscape of towns in the fourth-sixth centuries or immediately after. Deforestation and exhaustion of the hinterland which supported towns in the Gangetic and other plains would have been a cause of their decline. The preservation of cattle wealth, evidently to serve the needs of agriculture, was first emphasized by Gautama Buddha in the fifth century BC. With the beginning of the Christian era cow protection became an article of faith, so much so that even uneconomical cattle had to be fed. The long-standing practice may have destroyed much vegetation. Forests were further cleared for extending cultivation. Deforestation through overgrazing and the direct clearing of forests would diminish the supply of nitrogen and reduce rainfall, as has been noticed during the last hundred years in the Ranchi area in Bihar. This may have impoverished the hinterland. In pre-industrial times because of great transport difficulties towns had to depend primarily on intensive cultivation of the soil in the hinterland. If fertility was exhausted it could be made up by innovation in agricultural technology. But of this we have no indication in the third and the following two centuries, though we notice the increasing use of iron tools. Naturally the urban share of the agricultural surplus, which was precariously

[32] Ibid., ch. 11. Tin may have been imported from Indonesia to make bronze objects in eastern and southern India, but this has still to be proved.

[33] S. Sahai, "Medium of Exchange in Ancient Cambodia", *Journal of the Numismatic Society of India*, XXXIII, pt. I, 1971, 93 fn. 1.

[34] Ibid., p. 93.

[35] Lotika Varadarajan, "Indian participation in the Trade of the Southern Seas *circa* 9th to 13th Centuries", Typescript paper submitted to International Seminar on Indian Ocean, New Delhi, 1985.

[36] Ibid.

[37] Supra, pp. 129-30.

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small in the age of pre-industrial technology, once affected by any natural calamity or social disorder, could not be made up easily.[38] But this hypothesis needs more research.

The decay and disappearance of urbanism can be better explained in the context of the social upheaval reflected in the descriptions of the Kali Age in the Purāṇas.[39] One set of these descriptions is assigned to the end of the third and the beginning of the fourth century AD, and the other set to the eighth century.[40] Significantly enough the periods assigned to the Kali coincide with two periods of urban decline, the first belonging to the third and fourth centuries, and the second to the seventh and eighth centuries. Descriptions of widespread unrest are found not only in the Purāṇas, but their echoes can also be heard in the *Bṛhat Saṃhita* (AD 505) whose author would be familiar with the conditions in the fourth century. According to Varāhamihira when Jupiter tenants the star Vasākhā and Saturn Kṛttikā, there will be dreadful unrest and violence among the subjects; and when these two planets occupy one and the same constellation, the capital will be stormed.[41]

Greek and Roman cities were the seats of citizen landowners whose lands were cultivated by slaves in the countryside. But those who mattered in ancient Indian towns were not necessarily landowners. Townsmen were mostly non-agriculturists, with a few exceptions of peasants. Ordinarily merchants lived on the profits of trade, artisans on their manual earnings, and the religious and administrative functionaries on gifts, taxes, tithes and tributes provided by the peasants, artisans and merchants. In this manner the town ruled the country. Apparently the social upheaval identical with the advent of the Kali Age stopped the flow of taxes from the countryside. Recourse to rubble, brickbats, etc., in constructions suggests internal revolt in towns. The Kali crisis seems to have largely affected the western and central Deccan where many towns were deserted around AD 300. A similar picture obtains in a good portion of north India, especially in eastern Uttar Pradesh and Bihar.

The social crisis not only accelerated the process of grant of villages by the rulers for the support of priests and officials but also led to the widespread conversion of towns into fiefs. Towns were drawn into the network of the all-pervasive grant system. The town or its shops came to be treated as a kind of fief. The law-books of the early centuries of the Christian era provide for the grant of towns for administrative purposes. Manu, a lawgiver of about the second century, lays down that an officer-in-charge of

[38] This hypothesis has to be tested.

[39] R.S. Sharma, "The Kali Age: A Period of Social Crisis" in *India: History and Thought Essays in Honour of A.L. Basham*, ed. S.N. Mukherjee, pp. 186-203.

[40] Ibid., p. 187.

[41] *Bṛhat Saṃhitā*, X. 19.

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one thousand villages, should be rewarded with the revenue of one town.[42] Grants of towns became so common that they caused disputes. Therefore Nārada, a lawgiver of the fifth century, refers to disputes arising out of the grant of towns as *purapradānasaṃbhedaḥ*.[43] Julius Jolly is surprised at the grant of towns, and suspects that it was made to a younger prince of a royal family.[44] Later he thinks that it was made to the brāhmaṇas and others, and that it implied an *agrahāra*.[45] But in the view of what we know from Manu, Hsüan Tsang and inscriptions, towns were donated not only for religious reasons but also granted for fiscal and administrative services.

The account of Hsüan Tsang and inscriptions show that towns and shops were given away to temples and monasteries for meeting their needs. Such grants were also made to ministers, and military and administrative officials. Hsüan Tsang mentions several monasteries to which towns were donated. According to him ministers of state and common officials all had their portion of land, and were maintained by the cities assigned to them.[46] An inscription from the Banaras area, ascribed to the seventh/eighth century, speaks of the grant of one hundred townships (*pattana*) for the maintenance of a *pura*.[47] The term *pura* is translated as city or temple,[48] but since it was embellished with palaces and gateways,[49] it may have been both a religious and administrative centre.[50] In the ninth century the town of Siyadoni located in Lalitpur district of Uttar Pradesh granted to the brāhmaṇas a townlet called Rāyaka, and the beneficiaries were called Rāyakabhaṭṭas.[51] The Candella grants of 1136 and 1191 describe Pāṭaliputra as a *bhaṭṭāgrahāra*.[52] It may have been donated much

[42] *Manu*, VII, 119.

[43] *The Nāradīyamanu Saṃhitā with the Bhāṣya of Bhavasvāmin*, ed. K. Sāmbaśiva Śāstrī, Trivandrum Sanskrit Series, no. XCVII, Trivandrum, 1929, XVIII, 2. In the reconstruction of the verse, the term *purapradānasaṃbhedaḥ* is preferred by the editor, but MSS *Ka* and *Ga* read *dha* as *da* (ibid. p. 175 fn. 1.). In quoting the crucial passage in the *Vīramitrodaya*, Mitramiśra reads *puraḥ pradānam*, which is rendered as "gift or grant of a town" in J. Jolly, *Nārādiya Dharmaśastra* or *The Institutes of Nārada*, Wurzburg, 1875, p. 110. Jolly sticks to this translation in *SBE*, XXXIII, Oxford, 1889, p. 214.

[44] *Nāradīya Dharmaśāstra*, p. 110, fn. [45] *SBE*, XXXIII, p. 214, fn. 2.

[46] Watters, *On Yuan Chwang's Travels*, I, p. 177.

[47] *grāmābhidhāna-nayan-otsava-pattanaṃ dattaṃ-śatam ... EI*, XXXIV, no. 39, p. 246.

[48] Ibid., p. 246. [49] Ibid.

[50] Ibid., p. 246. In this grant no distinction is made between the village (*grāma*) and the town (*pattana*). What was granted went by the name of a hundred villages. They were evidently townships in the process of being reduced to the position of rural settlements.

[51] *EI*, I, no. 11.

[52] B.P. Mazumdar, "Selection of Capital Cities in Ancient Northern India", *Journal of Ancient Indian History*, XIV, 1983-84, pp. 117-39, 127. However in another Candella charter Pāṭaliputra is called a *nagara*. Ibid.

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earlier as an *agrahāra* for the maintenance of some brāhmaṇas. Such grants transferred the tolls and taxes collected from artisans and merchants by the prince to the coffers of the monastery, which could also partly mean the delegation of the town administration to the beneficiary. This would obviously disrupt the economic ties between the state and the town, and also possibly between town and town, for the local beneficiary would prefer to exercise complete control over the town for exploiting its resources. In the past ordinarily the monastery or the *saṃghārāma* used to meet its artisanal needs through alms collected by the monks from urban and other settlements; these served to pay for goods and services. But the landed beneficiary would establish direct ties between the producer and the consumer without the intervention of the middleman. The beneficiary might also compel artisans to produce articles not favoured by them. Articles of luxury could be substituted for articles of use. Thus grants would tend to restrict the economic operation of a town and gradually feudalize it. Tradesmen in such towns would not be able to play their normal role in economy. The terms and conditions of such grants, though not mentioned in any source, may not have been much different in essence from village grants which sometimes specified the transfer of merchants and artisans to the control of the beneficiary.

On the one hand mercantile activities suffered with the grant of shops and customs; on the other, merchants were increasingly involved in the management of the donated land. The Jātakas refer to some seṭṭhis with landed property, but some Gupta and post-Gupta inscriptions show that more and more merchants managed land in several parts of the country. In central India an Ucchakalpa ruler granted in AD 512-13 a village in favour of two gods for worship and for the repair of their shrines. In this case half the share from the village was given to the merchant Śaktināga, and presumably to two other merchants who were called Kumāranāga and Skandanāga.[53] We do not know whether the merchants who were made beneficiaries lived in towns. In another instance we hear of the management of a village granted to two temples.

Similar cases are found on the western coast. The two charters of Bhogaśakti, the Cālukya ruler of the Konkan area, issued in the beginning of the eighth century, show how merchants were assigned the management of land granted for religious purposes. In one case eight villages and money granted to the temple were placed under the charge of local merchants in groups of five or ten. Exempted from paying tolls to the state and providing rations for royal officers, they were enjoined to supervise annual religious processions.[54] In a second case a deserted town was re-settled and

[53] *CII*, no. 28, pp. 1-17.

[54] R.S. Sharma *Indian Feudalism*, p. 57.

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assigned along with three adjacent villages to two merchants who were granted a kind of municipal charter.[55] The process continued in different parts of the country. During the tenth century in Orissa we hear of the management of a village granted to two temples by an association of merchants.[56] Known as *Kamalavana-vaṇik-sthāna*, this body may have belonged to a town. Instances of merchant-managed land granted for religious purposes are also found in Andhra Pradesh and other parts of south India. The Malkapuram inscription of 1261-62 from Andhra Pradesh refers to sixty Drāviḍa brāhmaṇas, each one of whom was granted land by the founder of a large monastery. It is held that all these brāhmaṇas were probably merchants.[57] If merchants were thus entangled in land management it was bound to reduce their trading activities. The gradual transformation of the merchants into landed magnates[58] may have given them some social status but robbed them of urban functions.

[55] Ibid.

[56] B.P. Mazumdar, "Collective Landgrants in Early Medieval Inscriptions (*c* AD 606-1206)", *Journal of Asiatic Society*, X, nos. 1-4, 1968, p. 7.

[57] D.C. Sircar, *Epigraphic Discoveries in East Pakistan*, p. 38.

[58] R.S. Sharma, *Indian Feudalism*, p. 58.

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9

Consequences of De-urbanization

We cannot grasp the social significance of urban decline without an idea of the composition of the town population and its place in the ancient socio-economic set-up. Kauṭilya specifies about twenty types of craftsmen living in the fortified city.[1] The number of trades increased rapidly in later centuries. Vivid descriptions of the occupations of townspeople are found in the *Mahāvastu* and *Milinda-Pañho*, both written in hybrid Sanskrit and belonging to the first century AD. These can be supplemented by a Tamil text called *The Garland of Madurai* of about the third century.[2] The *Milinda* mentions seventy-five occupations in the imaginary city of Dhammanagara,[3] and the *Mahāvastu* mentions nearly one hundred occupations each in the cities of Rājagṛha[4] and Kapilavastu.[5] The Buddhist lists, which mostly mention merchants and craftsmen, do not contain conventional categories. The two *Mahāvastu* lists are not only different from the *Milinda* but also betray internal differences. The list of occupations is not so large in the Tamil text,[6] but its description of activities in Madurai on a festival day comes closer to reality.

An analysis of occupations, practised in the capital cities of Rājagṛha and Kapilavastu as well as in Śākala[7] and Dhammanagara shows that certain people such as brāhmaṇas, *śramaṇas*, *sreṣṭhins*, traders and hawkers, prostitutes, entertainers and above all warriors and others serving in the four wings of the army belonged to non-productive sectors. Most of these had no direct hand in production or even in distribution, and hence could be considered parasitic sections of the urban society. This could be said particularly of the large mass of the army stationed in the capital cities. In Rājagṛha and Kapilavastu the soldiers and high officials are referred to in a general manner,[8] but a long list of various types of warriors occurs in the

[1] *AŚ*, II. 4; II.6. [2] A.L. Basham, *The Wonder That Was India*, p. 203.
[3] Trenckner's edn., p. 331. [4] Sénart's edn., III, pp. 442-43. [5] Ibid., 113-14.
[6] *Pattupaṭṭu*, *Maduraikāñji* quoted in A.L. Basham, op. cit., pp. 204, 527, fn. 14.
[7] *Milinda-Pañho*, pp. 1-2.
[8] At the door of the royal palace in Rājagṛha those who assembled for the reception of the Buddha included *kumāramātyapārisadyāḥ (Mahāvastu*, III, p. 442), but on a similar occasion in Kapilavastu the crowd included not only the *kumāramātyas* but also the *dhanukarathikahastyārohas* (ibid., 114).

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Milinda.[9] The text speaks not only of elephants, horses, chariots and infantry, but also adds sixteen specialized categories of fighters[10] including some ancillaries. While dancers, wrestlers, acrobats, etc., appear in the city of Dhammanagara,[11] according to the *Mahāvastu* a list of nearly thirty types of entertainers including varieties of vocalists and instrumentalists appears in each of the two capital cities of Rājagṛha[12] and Kapilavastu.[13] The Rājagṛha list speaks of only one type of prostitute, the *gaṇikā*, but the Dhammanagara list adds two other categories, *lasikā* or dancer and *kumbhadāsī* or concubine.[14] Prostitutes also appear in Madurai.[15]

We have a list of servicing classes for meeting the physical needs of priests, soldiers, officials and rich merchants. Musicians and various other entertainers apart, cooks, washermen, bath assistants and bawds are mentioned in the *Milinda-Pañho*[16] immediately after the list of warriors.

There is no way to estimate the non-producing population in ancient towns. But soldiers and entertainers together with kṣatriyas, brāhmaṇas, śramaṇas, and numerous officials who are not specified in Buddhist lists formed a substantial group that had to be fed, clothed, housed and given other necessities of life without directly working for them. This group therefore could be called non-productive and parasitical. Some of them including monks, priests and state officials acted as collectors, but all of them were mainly consumers without being producers.

Nevertheless the urban economy had also its generative side. The texts attribute a large number of craftsmen to the capital cities. These include (*i*) goldsmiths, blacksmiths and other metal workers, (*ii*) workers in shell, precious and ordinary stone, and ivory,[17] (*iii*) arms makers,[18] (*iv*) textile

[9] *Milinda-Pañho*, pp. 2, 331.

[10] These include *dhannuggahā, tharuggahā, celakā, calakā, piṇḍadāvikā, uggā, rājaputtā, pakhaṇḍino, mahānāgā, sūrā, vammino, yodhino, dāsikaputtā, bhaṭṭiputtā, mallagaṇā* and *āḷārikā*. Ibid., p. 331.

[11] *naṭakā, naccakā, laṅghakā, indajālikā, vetalika* and *mallā*. Ibid.

[12] *tadyathā cakrika-tālika-gandhavikā naṭa-nartaka-ṛlla-malla-paṇisvarikā śobhikā laṅghakā kumbhatūṇikā velambakā dvistalabhānakā pañcavaṭukā gāyanakā guṇavartā tāṇḍavikā cetayikā gaṇikā hāsyakārakā bheri-śaṅkha-mṛdaṅga-pāṭahikā tūṇa-paṇava-vīṇā-vallakī-ekādasāyella-vādyakā anye ca bahuvādyakarā rājakula-dvāre sennipatensuḥ sarvāyo ca śreṇyo. Mahāvastu*, III, p. 442.
Mahāvastu, III, p. 442.

[13] The Kapilavastu list, which appears earlier in the *Mahāvastu*, is slightly shorter but includes most categories from the Rājagṛha list. Ibid., p. 113.

[14] *Milinda-Pañho*, p. 331.

[15] A.L. Basham, op. cit., p. 204.

[16] *sudā kappakā nahāpakā cundā. Millinda-Pañho*, p. 331.

[17] The terms used are *prāvārikā, śaṅkhikā, dantakārakā, maṇikārakā* and *prastārikā*. *Mahāvastu*, III, p. 113, cf. 442.

[18] *dhanukārā jiyakārā usukārā. Milinda-Pañho*, p. 331.

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workers and dyers, (*v*) transport workers,[19] (*vi*) potters and builders, and (*vii*) preparers of various types of eatables. Besides goldsmiths and silversmiths, metal workers included those who worked in tin, copper, brass and lead.[20] Textile workers comprised weavers of silk and wool.[21] It seems that the art of feeding silkworms on mulberry leaves was practised in India around the first century. Specialization in textile production is also indicated by the mention of weavers producing cloth for the army and those specializing in cloth weaving meant for deities (and probably priests). We also hear of laundrymen, dyers, cleaners and spinners.[22] Tailors *(tunnavāya* and those who dealt in woollen shawls *(dussikā)*[23] were nearer to these artisans. Those who dealt in cotton or cotton cloth were called *kārpāsika*.[24] *The Garland of Madurai* does not make much distinction between craftsmen and shopkeepers. According to it craftsmen such as painters, weavers, goldsmiths, coppersmiths, clothiers, florists, vendors of sandalwood and men who make bangles of conch-shell work in their shops.[25]

The needs of housing and household goods and utensils were met by builders, barn makers, decorators, plasterers, potters, modellers in clay, basket makers, carvers, carpenters, painters, decorators and tanners.[26] We may include well diggers in this list.[27] Incidentally the lists do not use any term for brick-maker.

The artisans and others of the kind who were engaged in preparing food and drink for the urban population formed a sizeable section. We find two kinds of brewers in the *Mahāvastu*.[28] *The Garland of Madurai* refers to flags flying on a festival day over the shops which sell the gladdening toddy. Even in the morning toddy is sold to thirsty morning travellers, and the drunkards reel to their feet and shout on the streets.[29] The *Mahāvastu*

[19] *mṛttikavāhakā ... nāvikā olumpikā. Mahāvastu*, III, p. 113; *kāṣṭhavāhaka*. Ibid., p. 443.

[20] *suvannakārā sajjhakārā sīsakārā tipukārā lohakārā vaṭṭakārā ayakārā. Milinda-Paṅho*, p. 331.

[21] *kauśāvika, Mahāvastu*, III, p. 113. The term, which is also read as *kośāvika*, is sometimes translated as makers of sheaths or scabbards, but apparently it is another form of *kauśeyāvika* which is mentioned in *Manu*, V.120. It means a person who weaves threads made out of silkworm shells (*kośa*) and those of wool from the sheep hair (*avi*).

[22] *urṇa-vāyakā varūtha-tantravāyakā devata-tantravāyā caıladhovakā rajakā śucikā tantravāyā. Mahāvastu*, III, p. 113. The *Milinda-Paṅho* (p. 331) mentions *raṅgakāra, rajaka* and *tunnavāya* (tailors).

[23] *Milinda-Paṅho*, p. 331.

[24] *Mahāvastu*, III, p. 442.

[25] A.L. Basham, op. cit., pp. 204, 527, fn. 14.

[26] The following list does not follow the order given in the body of the text: *citrakārakā vardhakirūpakārakāḥ kālapātrikāḥ pelalakāh pustakārakāḥ pustakakarmakārakā nāpitā kulpikā chedakā lepakā sthapatisūtradhārakā uptakoṣṭhakārakā kūpakhanakā. Mahāvastu*, III, p. 113.

[27] The term *kūpakhanaka* (ibid.,) is also translated as miner.

[28] *sunṭhikāḥ sīdhukārakāḥ, Mahāvastu*, III, p. 113.

[29] A.L. Basham, op. cit., p. 204.

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mentions nearly a dozen categories of cooks and specialists who prepared wheat flour, *sattu* (powder of fried foodgrains), cooked rice and various types of confectionery including curd, sugar, jaggery, etc.[30] Although these people are represented as dealers they also seem to be producers. In addition to them we notice sellers and hawkers of grass, wood, cooked rice, leaves, fruits, roots, boiled rice *(odana)*, cakes, fishmongers and butchers.[31] Regarding Madurai we are told that stallkeepers sell sweet cakes, scented powder, betel quids and garlands of flower.[32] We further learn that the Madurai food shops briskly sell greens, jackfruits, mangoes, sugar-candy, cooked rice and chunks of cooked meat.[33] The existence of all these categories presupposes a large circle of townsmen whose needs in respect of food were met by these hawkers and dealers.

The Buddhist texts mention not only the *sreṣṭhi* who was the chief merchant of the *nigama* and the caravan leader *sārthavāha* who was the head of the corporation of the merchants *(vaṇijgrāmo)* but also nearly half a dozen petty merchants called *vāṇija*. These are dealers in fruits *(phalavāṇijā)*, roots *(mūlavāṇijā)*, cooked food *(aṭṭavāṇijā)*, sugar *(sarkaravāṇijā)*, bark cloth *(valakalavāṇijā)*, sheaves of corn or grass *(stambavāṇijā)* and bamboo *(vaṃsavāṇijā)*.[34] These merchants therefore met the varied needs of the urban folk including food, dress and housing. To them we can add perfumers or all-purpose merchants called *gandhika*,[35] from which the term *gāndhī* is derived. Various types of oilmen, some of them dealing in perfumed oils, are covered by the term.[36] The term *āgrīvanījā*[37] seems to be obscure, but they may have been the predecessors of the *agrawalas* if we allow for the linguistic conversion of *n* into *l*.

Whatever be the nature of ritual, economic or occupational differentiation in the ranks of craftsmen in the post-Mauryan centuries, without doubt we notice remarkable specialization in handicrafts. For example, the *Milinda-Paño* speaks of bow manufacturers, bowstring makers and arrow fletchers, all in the context of bow-making.[38] Similarly it refers to painters, dye manufacturers and dyers.[39] Numerous trades and subtrades can be inferred from artefacts found in excavations at any urban site.

[30] *tailikā ghaṭakuṇḍikā golikā dadhyikā ...khaṇḍakārakā modakakārakā kaṇḍukā samitakārakā guḍapācakā madhukārakā ... ye ca anye pi vya vahārikā. Mahāvastu*, III, p. 442.

[31] *tiṇahārakā kaṭṭhahārakā bhatakā paṇṇikā phalikā mūlikā odanikā pūpikā macohikā maṃsikā majjikā. Milinda-Paño*, p. 331. In *Mahāvastu*, III, p. 113, dealers in wood, grass, *stamba* and bamboo are mentioned as *kāṣṭhavaṇijā, tṛṇavaṇijā, stambavaṇijā* and *vaṃśavaṇijā*. The spellings of some terms differ in the *Mahāvastu* and *Milinda-Paño*.

[32] A.L. Basham, op. cit., p. 204. [33] Ibid. [34] *Mahāvastu*, III, pp. 113, 442-43.

[35] *Milinda-Paño*, p. 331. [36] *Mahāvastu*, III, p. 113. [37] Ibid.

[38] *SBE*, XXXVI, pt. V, pp. 209-11. [39] Ibid.

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Variations in pottery, metalwork, ivory goods, glass objects, stone beads, etc., reveal numerous categories of artisans which have yet to be identified in the context of time and place. Meanwhile we could prepare a general list of artisans who would be found in important towns. Even if we leave the inscriptional evidence, artefacts suggest the presence of most artisans mentioned in Buddhist texts and many others not specified in them. Building workers included masons, tilers, bricklayers, mud wall makers, well diggers, etc. Those who worked in clay comprised skilled and unskilled potters, terracotta makers, modellers, manufacturers of seals, bullae manufacturers, and makers of moulds meant for coins, jewellery, clay figurines, etc. Workers in stone consisted of quarrymen, sculptors, makers of pillars and stupas, panels, railings, gateways, etc. Large numbers of craftsmen quarried, collected and worked in various types of precious and semiprecious stones for preparing beads and pendants which were used for religious and decorative purposes. Bead factories appear at several urban sites particularly in the Deccan and south India. Similarly glass objects suggest a large number of workers in glass and others who provided the necessary raw material for its manufacture. Metal objects attest the existence of not only jewellers and goldsmiths but also workers in lead, tin, iron, brass, bronze, copper and silver. Inscriptions show that various types of artisans including perfumers and flour makers made donations, and some of them acted as banks for religious purposes.

Neither the list of artisans and merchants given in the Buddhist texts are exhaustive nor have we exhaustively treated the artisanal and mercantile terms mentioned therein. But what has been stated above is sufficient to bring out the importance of craftsmen and merchants in the urban set-up. In *The Garland of Madurai* the streets are called broad rivers of people, who buy and sell in the market-place.[40] The importance of shopkeepers is indicated by the repetition of the term *āpaṇa* in the description of the city of Śākala.[41] Its shops appear as filled with various types of cloth made in Kāsi, Koṭumbara and other places.[42] Many artisans and merchants were organized into guilds called *śreni* and *āyatana*, but how these organizations functioned is indicated neither in the *Mahāvastu* nor in the *Milinda-Pañho*. Both merchants and craftsmen were divided into high, low and middle ranks.[43] What it means in terms of skill, status and income is not clear. There were certainly big and small traders and merchants, and also skilled and unskilled craftsmen. Skilled craftsmen producing and selling luxury

[40] A.L. Basham, op. cit., p. 204.

[41] *Milinda-Pañho*, p. 331.

[42] *kāsika-koṭumbarak-ādi-nānāvidha-vath-āpaṇa-sampannam*. Ibid.

[43] *ete cānye ca uccāvacā janatā hinotkṛṣṭamadhyamā sarve rājakule saṃnipatensuḥ. Mahāvastu*, III, p. 443.

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articles such as jewellers, goldsmiths and workers in semiprecious stones may have approximated to affluent merchants.

There is no doubt that towns were centres of exchange, production and technology. An ideal town was one whose granaries and treasuries were stocked with enormous quantities of corn, wealth and other provisions and which abounded in food, drink and various eatables.[44] But how these provisions reached artisans, merchants and numerous other townsmen is not clear. As a model city Śākala appears full of coins *(kahāpaṇa)*, silver, gold, bronze and precious stones.[45] This coupled with the Kauṭilyan provision for payment in money would suggest that together with religious, military and administrative sections of the urban society artisans and merchants mainly transacted in money. Plenty of coins, attested by both literature and archaeology, served no other purpose than that of exchange. The *hiraṇyaka* mentioned repeatedly in Buddhist texts may have been assayers of coins,[46] and the *sīsakāra*[47] and the *rūpakāra* may have been minters. The term *sīsa* was also used in the sense of money, and in view of plenty of lead coins issued by the Sātavāhanas the *sīsakāra* could be not only a worker in lead but also a minter of lead coins.

How did early historic towns feed the numerous categories of artisans and petty merchants, concentrated in them? Apparently they purchased foodgrains and other eatables from grain merchants and shopkeepers with the money that they received either from the sale of their labour or from that of their craft products. Similarly officials and state functionaries who received salaries in cash, and priests and monks who received donations in cash, would purchase their necessities, with the difference that affluent sections would need not only utility and essential articles but also luxury articles. Utility articles produced by craftsmen were needed not only by the towns but more importantly by the villagers who were not without their own artisans. In the context of Bronze Age it is held that craftsmen did little to cater to the primary needs of the urban people.[48] It may well be true if it means that the town did not pay its way. But how did the urban population receive the taxes and tributes on which they lived? Obviously these were collected from the agriculturists by state officials who lived in towns. Apparently artisans also received in cash or kind the

[44] *pahūta-dhana-dhañña-vitt-ūpakaraṇaṃ paripuṇṇa-kosakoṭṭhāgāraṃ bahu-annapānaṃ bahu-vidha-khajja – bhojja – leyya-peyya – sāyanīyam ...* "*Milinda-Pañho*, p. 2.

[45] *kahāpaṇa-rajata-suvaṇṇa-kaṃsa-pathara-paripuraṃ-pajjotamāna-nidhiniketam* ... Ibid.

[46] s.v. *hiraññika*, T.W. Rhys Davids and William Stede, *The Pali Text Society's Pali-English Dictionary.*

[47] s.v. *sīsa*, Monier-Williams, *Sanskrit-English Dictionary.*

[48] R.M. Adams, "The Natural History of Urbanisation", Gregory L.Possehl, ed., *Ancient Cities of the Indus*, p. 20.

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price of their tools and products from the peasants. We have no means to estimate the quantity of such tools though in one context we hear of a village trader depositing five hundred ploughs with a town merchant.[49] But the quality and effectiveness of the tools fabricated by craftsmen for agricultural use cannot be overlooked. Effective tools increased production in the hinterland which supported the urban population. Agricultural yield increased enormously when iron tools began to be used in production on a large scale. Both literary and archaeological data show that towns were centres of the manufacture of iron tools. Luxury articles produced by craftsmen were used locally and taken over long distances by traders. Traders and merchants would trade in staple products, raw materials and finished products including oil and cloth, mostly at local levels. Trade in ivory objects, glass goods, beads of semiprecious stones, fine textiles including wool, silk and cotton would cover long distances. This was also true of trade in spices, metals and iron cutlery. Artisans and merchants therefore were concerned with both utility and luxury goods.

Towns cannot be called parasitic irrespective of societies in which they are located. They appear to be so in the initial stage of feudal society, although they play a generative role in its later phase, particularly in Western Europe. In classical, ancient, pre-feudal societies towns perform important economic functions and contribute to growth.[50] This is also true of early historic towns in India. Although we find substantial sections of the townspeople to be parasitical, the contribution of craftsmen and merchants to the development of economy and political power cannot be overlooked.

The *Arthaśāstra* of Kauṭilya enumerates more sources of state income from the town *(durga)* than from the countryside *(rāṣṭra)*.[51] A fortified settlement or town accounts for as many as twenty sources of revenue to the state.[52] Three of these related to the income collected by the state-appointed superintendents of mints, passports and temples. The superintendent of temples *(devatādhyakṣa)* may have been connected with the offerings made to the deities, the master of the mint with the examination of coins, and the superintendent of passports with revenue collection from those who entered the country. Liquor, slaughter-house, weaving, and weights and measures also appear as sources of income.[53] Clearly these incomes were derived from artisanal and commercial activities. The city superintendent *(nāgarika)* is also mentioned as a source of income.[54]

[49] *Jātaka*, II, p. 181.

[50] Keith Hopkins, "Economic Growth and Towns in Classical Antiquity", Philip Abrams and E.A. Wrigley, ed., *Towns in Societies*, pp. 73-75.

[51] *AŚ*, R.P. Kangle's edn., II. 6.2-3. [52] Ibid., II. 6.2. [53] Ibid.

[54] Ibid.

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Apparently he collected fines from the offenders against city laws. The state also derived income from oil, ghee, jaggery or sugar, the goldsmith, the market, the group of artisans and artists, customs duties, and from the dues received at the gates and those from outsiders. Prostitutes, gambling and buildings also appear as sources of revenue.[55] All these items of income are typical of an urban society. We may add to them *daṇḍaḥ*[56] or fines, which were apparently derived from judicial or magisterial fines. Whatever be the age of Book II of Kauṭilya's *Arthaśāstra* which contains all this information, it was seemingly pre-feudal. As centres of production and distribution ancient towns contributed considerably to the coffers of the state. It is no wonder that Kauṭilya recommends a policy of deliberate urbanization which also appears in the *Milinda-Pañho*.[57]

In pre-feudal India artisans helped maintain a large army by manufacturing goods and equipment for it and by paying taxes to the state.[58] We learn that the Mauryas maintained six hundred thousand soldiers in the fourth century BC. This number may not be an exaggeration if we recall that in its heyday the Roman empire had the same military strength. The army is likely to have maintained its strength under Aśoka, who did not disband his army despite his pacific policy. Under the Sātavāhanas, the Kuṣāṇas and the Kṣatrapas the number of the soldiers may have been reduced. But even then large armies had to be kept for waging wars and suppressing revolts. In spite of the immunity of some donated villages from the entry of soldiers the army was needed for maintaining order in the countryside and defending the dominions under direct control. Under the successors of the Mauryas the practice of vassals supplying soldiers did not prevail widely.

If the pre-feudal states maintained large armies, we have to find out how these large armies were fed, housed, clothed, equipped and transported. Here towns played an important role. The income derived from towns and trade may not have been of the same order as that collected from the countryside, but its relevance to the state cannot be disregarded. What is more important, large armies needed weapons and means of transport. Near the royal palace Kauṭilya earmarks a part of the town for the habitation of workers in wool, yarn, bamboo, leather, armours, weapons and shields. It is laid down that these artisans and śūdras should live in the western quarter.[59] However workers in metals and jewels and the brāhmaṇas are assigned the northern quarter.[60] Whether the localization of artisans for ready service to the state prevailed in Maurya times or

[55] Ibid. [56] Ibid. [57] Trenckner's edn., pp. 330-31.

[58] *Milinda-Pañho*, p. 331; *Mahāvastu*, III, pp. 113, 443. For army weavers the term *varūtha-tantravāyakā* is used in the *Mahāvastu*.

[59] *AŚ*, R.P. Kangle's edn., II. 4.12-13. [60] Ibid., II. 4.14.

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continued in post-Maurya times is difficult to ascertain. But the Buddhist texts of about the first century AD refer to craftsmen including chariot-makers, manufacturers of bows, strings and arrows, and army weavers.[61] Large-scale monetization in pre-feudal times suggests that the artisans produced petty commodities which were purchased by the peasants and others with money or exchanged in barter. This process enabled both artisans and traders to pay their taxes; otherwise how could so many taxes be collected from the fortified city *(durga)*?

The decline of towns undermined the ability of the tradesmen to pay taxes in Gupta and post-Gupta times. Evidently because of this a Sanskrit commentary of the thirteenth century on a Jain Prākrit text contains puns about the term *nagara* (town) and calls it *nakara*, non-taxpaying. On the other hand it states that the village is oppressed with eighteen types of taxes *(aṣṭādaśakarāh)*.[62] But because of grants of villages on a wide scale even the source of rural revenue was undermined. Hence the sovereign had to depend primarily on his vassals. Hsüan Tsang informs us that Harṣa kept sixty thousand war elephants and a cavalry of one hundred thousand.[63] This presents a sharp contrast to the army of Chandragupta Maurya, who had nine thousand fighting elephants and a cavalry of thirty thousand. Although the number of the infantry is not given by Hsüan Tsang, keeping in with his other figures it would come to nearly twenty millions, for the Maurya infantry numbered around six lakhs. How do we explain this contrast between the army of the larger Maurya empire and that of the smaller empire of the Harṣa? Obviously regiments to Harṣa's army were supplied by vassals and mobilized only in times of war. This practice can be inferred from the account of an Arab merchant Sulaiman who wrote around the middle of the ninth century. He states: "The troops of the kings of India are numerous, but they do not receive pay. The king assembles them only in case of a religious war. They then come out, and maintain themselves without receiving anything from the king".[64] This would mean that most of the soldiers who fought for the sovereign did not receive pay from him. Apparently they were paid by vassals or lesser kings who supplied their stipulated quotas to the sovereign overlord. But the statement that the king mobilized soldiers only for fighting religious wars seems to have been made in the context of the war between the Muslim

[61] *Milinda-Pañho*, p. 331; *Mahāvastu*, III, pp. 113, 443.

[62] *'nāsti' na vidyate' trāṣṭakarāṇāmeko' pi kara iti nakaram. Bṛhat Kalpa Sūtra Niryukti*, ii, bhāṣya gāthā 1089, p. 342. *aṣṭadaśānāṃ karāṇāmiti vyutpattyā grasate ... grāma ucyate*. The commentary was written by Malayagiri and Kṣemakīrti who are placed around 1275, J.C. Jain, *Prākrit Sāhitya Kā Itihās* (in Hindi), p. 180.

[63] *Si-Yu-Ki*, I, p. 213.

[64] H.M. Elliot and John Dowson, *The History of India As Told by its Own Historians*, I, p. 7.

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Arabs and the Hindu Gurjara Pratīhāras. In western and northern India we have hardly any examples of religious wars fought between the Indian kingdoms. However when Sulaiman speaks of unpaid soldiers of the kings, he makes an exception in the case of the Balhāra or the Rāṣṭrakūṭa king who was a friend of the Arabs. He states that the Balhāra "gives regular pay to his troops, as the practice is among the Arabs".[65] This implies that the Rāṣṭrakūṭa king maintained a paid professional soldiery, which, in our view, would apply to all the other kings. Clearly every state maintained a core of minimal soldiery which would be borne on the back of the peasants. But on account of loss of revenue through the decay of towns and grants of villages the state had to raise contingents from its vassals and delegate policing powers to its beneficiaries in the rural areas.

What did de-urbanization mean to the town dwellers? The composition of the ancient urban population is indicated by several texts. The *Arthaśāstra* of Kauṭilya shows that the inmates of the royal palace, the councillors, priests and preceptors, commanders, and, above all, the four wings of the army comprising elephants, horses, chariots and infantry lived in the fortified city.[66] The *Milinda-Pañho* also indicates that these four wings together with various kinds of warriors and army officers formed a sizeable segment in the city.[67] These elements either continued to dwell in some old decaying cities or moved to newly fortified places on the desertion of the old towns. But the number of the regular soldiery seems to have become minimal. The state army supported by taxes collected from the peasants was reinforced in times of war by the contingents supplied by the vassals in lieu of villages assigned to them or in return for recognition of their authority to rule in their respective areas. Non-agriculturist settlements in Gupta and post-Gupta times appeared as garrisons or military camps, administrative seats, pilgrimages, religious establishments, etc. Several decaying towns are called military camps or *skandhāvāra* in the land grant inscriptions of the fifth-eighth centuries.[68]

We can speculate on the fortunes of the merchants including dealers in grain, cloth, perfume, etc., who appear as townsmen in the *Arthaśāstra*[69] and *Milinda-Pañho*.[70] In Pāli and other texts the town was called *nigama* and the countryside was called *janapada*. It is significant that the term *nigama*, which literally means a place for going out and thus indicates trade

[65] Ibid., p. 3.

[66] *AŚ*, II, 4.

[67] T.W. Rhys Davids (tr.), *The Questions of King Milinda*, *SBE*, XXVI, pt.V, pp.209-11. The description relates to the imaginary city of Dhammanagara, but it cannot be far removed from reality. In fact it corresponds closely, to the description of the fortified city (*durganiveśa*) given by Kauṭilya in *AŚ*, II. 4.

[68] R.N. Nandi, "Client, Ritual and Conflict in Early Brahmanical Order", *The Indian Historical Review*, VI, pp. 81-85.

[69] *AŚ*. II. 4.

[70] *SBE*, XXXVI, pt. V, pp. 209-11.

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and mobility, was used to denote not only town but also guilds of artisans and traders. Their number may have dwindled. Some merchants could have taken to agriculture and land management, others may have become itinerant vendors moving from village to village with petty commodities. Although Kauṭilya mentions some peasant households living on the outskirts of towns,[71] small shopkeepers would have no difficulty in pursuing agriculture after the decay of the town. Petty merchants may have migrated to the rural areas where they would either take to agriculture or else carry on their avocations on a decreased scale. As we know, both trade and agriculture were recommended for the vaiśyas.

Bigger merchants may have turned into landlords wherever opportunities helped them. We may refer to the case of the merchant Udayamāna and his two brothers who went on business from Ayodhya to Tāmralipti and made plenty of money.[72] On way back home they stayed for some reason in a village in Hazaribagh district. When Ādi Siṃha, the local king, happened to visit that forested area, Udayamāna pleased the king with his tribute *(avalagana)*.[73] The king invested the merchant with the diadem *(śrīpaṭṭa)*, and with royal consent the inhabitants of the village Bhramaraśālmali made him their *rājā*.[74] At the request of the inhabitants of the two other villages Udayamāna made each one of his two brothers the ruler *(mahīpati)* of a village each.[75] All this appears in an inscription of the eighth century which was recorded generations after the event had happened.[76] The object of recording it so late was to assert the political supremacy of the lineage *(gotra)* of the elder brother Udayamāna over the descendants of the two younger brothers who ruled over the two other villages.[77] The event may have occurred two centuries earlier when Ayodhya decayed as a town. Although the merchant's motives for acquiring the headship of the three villages in the forested area of Hazaribagh are not stated in the inscription, they certainly used their huge wealth *(suvarṇṇa-maṇi-māṇikya-muktā-prabhṛti)*[78] to set themselves up as rural lords with the favour of the local king. They were backed by the villagers who requested them to become their lords. Some big merchants from other towns may also have converted themselves into rural magnates.

Urban decline seems to have generated a marked scorn for artisans, who were mainly concentrated in towns. Although certain crafts such as those of the basket-maker, chariot-maker, etc., were considered low *(hīnasippāni)* in several Pāli texts, the eighteen guilds or *śreṇis* of craftsmen repeatedly mentioned in the Jātakas did not carry any stigma. But in early

[71] *AŚ*, II. 4.

[72] F. Kielhorn, "Dudhapani Rock Inscription of Udayamāna", *EI*, II, no. 27, ll. 2-3.

[73] Ibid., ll. 6-7. [74] Ibid., ll. 8-9. [75] Ibid., ll. 10-11. [76] Ibid., p. 344.

[77] *EI*, II, no. 27, ll. 11-13. [78] Ibid., ll. 6-7.

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medieval times the eighteen *śreṇis* came to be identified with eighteen *jātis* or *prakṛtis*, which came to be considered low.[79] Early medieval sources suggest an inferior position for craftsmen.[80] Some artisans were condemned as untouchables. These include weavers, dyers, tailors, barbers, braziers, shoemakers, oilmen, fishermen, ironsmiths and goldsmiths.[81] Weavers occupied a high position in a fifth century inscription, but Albiruni listed them as untouchables.[82]

A far more important consequence was the migration of the artisans from towns. In the late fifth century a guild of silk-weavers migrated from Gujarat to Mandasor in Malwa and took to various avocations including those of poets and archers.[83] Such migrations and changes in profession seem to be a natural phenomenon. Most artisans may have migrated to the hinterland whose raw produce supported them. If this possibility was not available they could go farther or change their avocations. But dispersal of crafts in the rural areas could be an important consequence of the decay of towns.

Migrations seem to have assumed several forms. We know that artisans lived in fixed localities in towns. In some cases this localization of crafts in towns was also kept up after migration to the rural areas. This can be conjectured on the basis of village names in Vākāṭaka land charters. We may mention six such villages, and begin with Kaṃsakāragrāma,[84] a village of braziers who work in brass and are known as *kaserās* in modern times. It would be a mistake to think that the whole village was inhabited by braziers, but certainly their population was sufficient to name the village. The braziers may have served the neighbouring countryside in supplying and repairing brass tools and utensils on an itinerant basis, moving from place to place with their kit consisting of a little furnace fitted with a blower and an anvil and hammer. Or else clients would have to move to their cottage workshops for meeting their needs. A second localized group of localized artisans, in this case the carpenters, moved from the town and formed Karmakāragrāma.[85] The carpenters may have served in the same

[79] B.N.S. Yadava, *Society and Culture in Northern India in the Twelfth Century*, pp. 42, 54, 96-97, fns. 463-66.

[80] Gy. Wojtilla in *Les Communaute's Rurales*, Troisieme partie: Asie et Islam, p. 121.

[81] B.N.S Yadava, op. cit., pp. 42-43, 45-47.

[82] Ibid., p. 42.

[83] D.C. Sircar, *Select Inscriptions*, I, BK, III, no. 24.

[84] The list of ninety-five villages found in Raghavendra Vajpeyi, "Opposite Pulls of Deurbanization and Semi-urbanization in Vidarbha in the Time of the Vākāṭakas", a paper submitted to the Amritsar session of the Indian History Congress in 1985 (unpublished), shows that several settlements were dominated by artisans, who evidently migrated from decaying towns. Vajpeyi has used some material from K.M. Shrimali's *Agrarian Structure in Central India and the Northern Deccan (c. AD 300-500)*.

[85] Vajpeyi, op. cit.

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fashion as the braziers except that the first would need tin, iron, copper etc., and the second would need timber. Similarly the village of Lavaṇa-tailika,[86] salt manufacturers and oilmen, may have been formed by artisans migrating from decaying towns. Such a settlement was particularly important because even the ordinary rural people could not do without salt and oil. We also hear of a village called Madhukajjhari,[87] which may have been set up by *mahuā* distillers. The village of goldsmiths, Suvarṇakāragrāma, may have been founded by jewellers migrating from decaying towns. They were probably affluent artisans-cum-merchants having dealings with the well-to-do strata[88] of rural society, Lohanagara, a village of blacksmiths, may have originated from some specialized locality of urban artisans who set up their settlement in the countryside. The village of the leather workers called Carmmāṅka[89] may have been set up either as a result of the migration of these artisans from towns or may have been a suburban settlement.[90] We are also told of a village called Vetālika (written as Vatālika) which may have given shelter to entertainers.

In view of the decline of Paunar, Kauṇḍinyapura and other towns in the Vākāṭaka kingdom we may assume that artisans migrated for short or long distances, and earned their livelihood by serving the rural population. They reduced the usefulness of petty merchants who trafficked between the village and the town. In the process they dispersed their crafts in the rural areas so that villagers could become self-contained and self-reliant.

The skill and expertise of urban artisans was disseminated in the villages. Possibly the crafts and luxuries typical of towns spread in the countryside. The emerging landlords in the old, settled rural areas may have enjoyed these luxuries, and the products of crafts may have been consumed by both the peasants and the landlords. Just as the elements of the Harappan culture spread in rural settlements in Sind and Gujarat after the disappearance of the main centres, a similar development may have taken place after the urban phase of Kuṣāṇa and Sātavāhana times and also after the decay of urbanism in Gupta times. But this hypothesis cannot be easily tested until the archaeology of medieval rural sites is developed. Rural areas may have received some urban elements, and urban areas may have been ruralized. Such diffusion undermined the distinction between the town and the countryside. Therefore in some medieval texts the term *nigama* came to mean a village, and the village came to be called *pura* or *nagara*.

The obliteration of the distinction between the town and the village is evident from the *Mānasāra*, a work on architecture compiled some time after the twelfth century. The text discusses the planning of the village

[86] Ibid. [87] Ibid. [88] Ibid. [89] Ibid.
[90] Ibid.

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and the town in such a manner that one cannot be differentiated from the other. Chapter 9 of the text is called *grāmalakṣaṇa* (village scheme) and chapter 10 *nagaravidhāna* (layout of towns). P.K. Acharya, editor and translator of the text, thinks that both the chapters deal with town-planning. He however adds that town-planning is treated under the categories of village, town and fort.[91] Fort therefore is not considered to be the same as town. Measurements prescribed for *kheṭa* and *kharvaṭa*, two smaller categories of towns, are the same as those for the villages bearing these names.[92] While describing the *prastara* variety of village, the *Mānasāra* lays down that the village should be laid out as the *pattana*, the *kheṭaka* or the *kharvaṭa*, [93] the three varieties of town. It is called *pattana* when inhabited mainly by the vaiśyas, *kheṭaka* when mainly inhabited by the śūdras, and *kharvaṭa* when mainly inhabited by the *pratilomas* [94] or people of mixed castes who appear as a result of union between women of higher castes and men of lower castes. The concentration of mixed castes, mostly untouchables, in the *kharvaṭa* shows that towns were held in contempt in early medieval times.

The distinction between the town and the country became more and more blurred in early medieval times. At any rate the *Mānasāra* does not consider the village to be much different from town in its planning scheme. In an elaborate description of the *daṇḍaka* type of village,[95] it states that if this village be situated on the bank of a river it is called a *pura*.[96] Similarly the *nandyāvarta* type of village is called *pura* when its second, third and fourth rounds are inhabited by the kṣatriyas, vaiśyas and the other castes; [97] obviously its first part is inhabited by the brāhmaṇas.[98] Therefore the *Mānasāra* does not distinguish the *pura* from certain types of villages. It also betrays lack of distinction between the village and the *nagara*. A *daṇḍaka* village with an assemblage of fifty initiated brāhmaṇas (*dīkṣita*) is called a *nagara*. [99] A few other provisions in the *Mānasāra* are significant. For instance, the *svastika* village, which is inhabited by people of all classes, is fit for the residence of the king.[100] This would suggest that either the king lived in a town or the *svastika* village was the residence of an important vassal.

The royal palace is to be also located in the *nandyāvarta* village,[101] which is to be inhabited by the vassals (*sāmantas*) and landowners (*svāmipas*).[102] In this village provision is made for the habitations of oilmen and

[91] P.K. Acharya, tr., *Architecture of the Mānasāra*, p. xxxv. [92] *Mānasāra*, X. 18

[93] Ibid. IX. 228-29.

[94] Ibid. The terms *vaiśyasaṃgha* and *śūdrasaṃgha* are used. P.K. Acharya reads *pṛthuloma* and translates it as 'broad haired? Kshatriyas', but apparently the correct reading is *pratiloma*.

[95] *Mānasāra*, IX. 57-60. [96] Ibid., 60. [97] Ibid., 108. [98] Ibid.

[99] Ibid., 61. [100] Ibid., 182. [101] Ibid., IX. 111-13. [102] Ibid., IX. 114.

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potters, [103] fishmongers, Kirātas and butchers,[104] washermen and dancers,[105] tailors (or nurses meant for helping child delivery),[106] carpenters and basket makers,[107] arm manufacturers and leather workers,[108] and for all those who live by other occupations.[109] Obviously the artisans living in this type of village served the royal household. Attached to it through the *jajmānī* system, they may have been paid in kind out of the grain tax collected by the king. It is further provided that the *nandyāvarta* village may have brāhmaṇas up to four thousand.[110] Apparently they were supported by land grants which had become fairly common by the seventh century.

The period 300-1000 which coincided with the first phase of feudalism, was not without its non-agriculturist settlements, but we notice a change in the composition of their population and in the pattern of their occupations. Now we find more people who managed religion, administration and military affairs, apart from a good number of soldiers. The number of artisans and traders substantially decreased. Capitals, garrisons, temples, monasteries, pilgrim centres became primarily centres of consumption. Even in the field of crafts they did not produce much, although they could not completely dispense with trade. Long-distance trade was apparently limited to costly goods of prestige, luxury and religious use.

The system of exchanging presents and collecting tributes could make available to chiefs, princes and big landlords articles which were not found in their own regions, but the extent to which the practice prevailed is not known. Mutual presents passing between peasant households forming part of a marriage and kinship network and living within a radius of twenty km could be a substitute for trade.

In the urban phase thriving trade coupled with the use of money would undermine the institution of mutual presents which sustained communal feasts. The decline of trade and urban life would invigorate the practice of mutual aid which characterized communal feasts. These feasts did not require much shopping with money but were based on mutual gifts and reciprocal aid in labour. Originating as tribal practices, they were sanctified by custom and religion. Survivals of the institution of communal feasts are found in various rural parts of northern India, but in a Bhagalpur village the survival of mutual gifts seemed to be quite strong even sixty years ago.[111] In it sixty per cent of the material required for marriage, funeral and other domestic rituals was obtained through presents and labour aid received from relations on paternal and maternal sides. Even people

[103] Ibid., IX. 121. [104] Ibid., 122. [105] Ibid., 123.
[106] Ibid., 124. P.K. Acharya prefers tailors. [107] Ibid., 125. [108] Ibid., 126.
[109] Ibid., 127. [110] Ibid., IX. 155-56.
[111] I gathered information about the nature of communal feast from Nathan Jha (86), an inhabitant of Gauripur village in Thana Bihpur of Bhagalpur. Jha worked as a fiscal functionary under a British indigo planter till the early thirties.

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living outside the kin system contributed. All this contribution included not only foodgrains and other eatables but also clothes. It was so substantial that if a person fell on bad days, the best course recommended for him was to launch a domestic sacrifice such as marriage, sacred-thread ceremony, etc. This would solve his immediate problem, and after the end of the feast would leave him enough provisions to enable him to carry on for a couple of months.[112]

As a consequence of urban decline the occupations of artisans were ruralized and the economy in which they functioned was demonetised. The artisans who served various establishments were granted land for their maintenance. This was a common feature of temples in south India.[113] In the eastern part of the subcontinent a tenth century copperplate land grant from Sylhet in Bangladesh provides a good illustration of tenure services for artisans and professional classes. Varieties of artisans served a large religious establishment, the like of which was to be hardly found in epigraphic records from the northern part of the subcontinent.[114] The Pashchimbhāg copperplate of Śrīcandra, dated 930, records land grants for running one large *maṭha* and other not so large eight *maṭhas*. It states that 120 *pāṭakas* of land, estimated at 1800 acres, was granted to the large *maṭha* in Candrapura in Puṇḍravardhana.[115] This land was allotted to various artisans, professionals and entertainers in the service of the temple monastery. The beneficiaries included a grammar teacher, ten students, five guest brāhmaṇas, the brāhmaṇa who built the temple, the accountant and the scribe.[116] The entertainers included a dancer, two conch-shell blowers, two drum-beaters, five big drum-beaters and eight kettledrum-beaters.[117] Groups of artisans and servicing classes comprised four florists, two oilmen, two potters, two carpenters, two masons, two blacksmiths, eight sweepers (*veṭṭikas*).[118] What is significant, land was also granted to twenty-two agricultural labourers and leather workers. They were granted 23.5 *pāṭakas* of land.[119] In addition, forty-seven

[112] I owe all this information to Nathan Jha.

[113] B.K. Pandeya, *Temple Economy under the Cōḷas (c. AD 850-1070)*, pp. 60-63.

[114] D.C. Sircar, *Epigraphic Discoveries in East Pakistan*, pp. 32, 37. [115] Ibid., p. 32 f.

[116] K.G. Chaudhury, "Paśchimabhāg Copper-plate of Mahārāja Srīchandradeva (10th cen. AD)" *N.K. Bhattasali Commemoration Volume*, pp. 166-98, 11.37-38 of the inscription.

[117] Ibid., ll.39-40.

[118] Ibid., ll.38-41. D.C. Sircar prefers the reading *ceṭṭikānāṃ* to *veṭṭikānām*, op. cit., p. 67.

[119] *dvāviṃśati-karmmakara-carmakārāṇāñca pratyekam ardhapāṭakaḥ*. K.G. Chaudhury, op. cit., l.40. D.C. Sircar renders *karmakara* as servant, which does not convey the real meaning. Apparently the *carmakāra* or the chamars worked not only as cobblers but also as agricultural workers as they do even today in north India. The *karmakaras* who were placed with the chamars were originally hired workers (frequently a part of the phrase *dāsa-karmakara)*, but now they were enserfed with grants of land, a practice which also affected artisans.

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pāṭakas of land was provided for repairs or *navakarma* in the large *maṭha*.[120] The yield from this land may have been used for procuring building material and supporting masons, architects, transport workers, etc.

Although singly more persons were attached to the large *maṭha*, taken together far more artisans, professionals, entertainers, and servicing people were attached through grants of land to eight *maṭhas*, four located in Vaṅgāla and four outside it. These monasteries governed 280 *pāṭakas* of land.[121] The beneficiaries of this land consisted of eight teachers (*upādhyāyas*), forty students, two *mahattara* brāhmaṇas, two kāyasthas, two *vārikas* or distributors, two accountants (*gaṇakas*) and two *vaidyas* or physicians. Sixteen *veṭṭikās* or sweepers were granted three-fourths *pāṭaka* each. Further eighty *pāṭakas* of land was granted for repairs in the eight *maṭhas*,[122] which work may have engaged a good number of various categories of building workers. Furthermore, eight florists/gardeners, eight barbers, eight oilmen and eight washermen were granted half a *pāṭaka* of land each for serving the eight *maṭhas*.[123] More importantly, sixty-four agricultural labourers and leather workers were granted half a *pāṭaka* each for the same purpose.[124] Evidently besides pursuing their own occupations the leather workers also worked in the fields belonging to the non-cultivating functionaries of the eight *maṭhas* and also of the large *maṭha*. The *carmakāras* or chamārs apparently worked as ploughmen for which they were granted land. Survivals of this practice are widespread in Bihar, Uttar Pradesh and other parts of northern India. But those chamārs who as leather workers were made part of the *jajmānī* system were given either fixed sheaves of harvested crops or quantities of cereals. In return they supplied shoes and straps of leather for plough equipment.

The large or the Candrapura *maṭha* supported nearly one hundred beneficiaries, and the remaining eight monasteries nearly 250 beneficiaries.[125] These included not only teachers, students and higher functionaries but also a good many artisans, all living on land grants. Except for some chamārs and agricultural workers all were non-agriculturists. The fact that artisans and agricultural workers were granted land gave them control over the means of production and therefore greater independence than they enjoyed in the *jajmānī* system.

The mode of remuneration through subinfeudation of land that prevailed in the temple-cum-monastic establishments obviously prevailed in princely, chiefly and big secular establishments or settlements which were numerically dominated by non-agriculturists. Unfortunately their records are difficult to trace. It seems that the princes deliberately founded

[120] K.G. Chaudhury, op. cit., l.41 of the inscription.
[121] Ibid., l. 47.
[122] Ibid., ll. 42-47.
[123] Ibid., ll. 44-45.
[124] Ibid.
[125] Cf. K.G. Chaudhury, op.cit., p. 195.

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temple-cum-monastic establishments on a feudal pattern in new areas. These institutions not only strengthened political authority but also provided sources of livelihood for all those who had to leave decaying towns or over-populated villages.[126]

The description of towns in Buddhist and Sanskrit texts show that they were not only seats of rulers, officials, armymen, traders and craftsmen but also of *śramaṇas* and brāhmaṇas. Kauṭilya mentions brāhmaṇas as town dwellers,[127] and so does the *Milinda-Pañho*.[128] Brāhmaṇas and *śramaṇas* appear in the descriptions of Dhammanagara and Śākala in the *Milinda-Pañho*. Brāhmaṇas also appear prominently in the *Mahāvastu* descriptions of Rājagṛha and Kapilavastu. They lived on the gifts made by the kings, officials, merchants and artisans. The decay of towns therefore affected their source of livelihood. It has been therefore correctly held that the brāhmaṇas moved to the countryside for finding sources of subsistence[129] which comprised land grants. The names of the original homes of the brāhmaṇa migrants suggest their migration from a good many towns. The epigraphs of the fourth-seventh centuries include Ayodhya, Kanauj, Mathura and Śrāvastī in Uttar Pradesh, Mandasor (identical with Daśapura), Ujjain and Vidisha in Madhya Pradesh; Broach, Nausari, Sopara (identical with Aniruddhapura), Vaḍanagara or Vadner, and Valabhi in Gujarat; and Puṇḍravardhana or Mahasthangarh in Bangladesh.[130] Later inscriptions ranging up to the eleventh century mention Ahicchatrā, Pāṭaliputra, and Vaishali in the north; Girnar in Gujarat; Karad (Karahāṭaka) in Maharashtra; and Banavāsi in Karnataka.[131]

The western coast is naturally associated with seaborne commerce which generated urbanism. But it is significant that post-Gupta epigraphs speak of continuous migration of brāhmaṇas from towns in that area. Land grant inscriptions show that brāhmaṇas continued to move from urban homes to the countryside not only in numbers of 1-3 but also in those of 34,40,44 and 63 at a time.[132] This process is clearly discernible in the sixth-eighth century, and continues in the following centuries.

[126] The practice of supporting artisans and others through land grants continued in later centuries. The Malkapuram stone pillar inscription of AD 1261-62 from Andhra Pradesh shows that Viśveśvara, the founder of a monastery called Srī-Viśveśvara-Golakī, and also the principal of a college attached to it, granted land to 101 persons. They included teachers and other professionals, entertainers (including dancers, songstresses and drum players) and village guards. They also comprised ten mechanics (*kārus*), barbers, artisans (*śilpins*) and engineers (*sthapatis*) who worked in gold, copper, stone, bamboo and iron. D.C. Sircar, *Epigraphic Discoveries in East Pakistan*, pp. 37-39.

[127] *AŚ*, II.4.

[128] *SBE*, XXXVI, pt.V, pp.209-11.

[129] R.N. Nandi, op. cit., pp. 80-89.

[130] Ibid., pp. 80-84.

[131] Ibid. pp. 84-88.

[132] See Appendix 1.

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The sites of many western or other towns from where the brāhmaṇas migrated have been excavated, and they appear in a state of decay in Gupta and post-Gupta times. However the brāhmaṇas migrating from Ahichatrā, Pāṭaliputra and Vaishali may have lived at intermediate homes from where they moved to the donated villages, for in these cases the villages are situated too far from the original homes of the donees. The dispersal of the brāhmaṇas in the countryside raised the cultural level of the peasantry and enriched agricultural technology.

Unlike the brāhmaṇas the Buddhist monks did not live within the bounds of the city. Marshall rightly points out that the Buddhist monastery lay close to the town on which the friars depended for begging their daily bread.[133] The Buddha generally spent the rainy season in the vicinity of some city. Therefore the ideal place for the residence of early renouncers was a spot not too far from the town and not too near, suitable for going and coming, easily accessible to all people, secluded from men, and well fitted for a retired life.[134] Naturally early *saṅghārāmas* or monasteries are found in the suburbs of towns. This seems to be true of monasteries and stupas in Taxila, Bhita, Sarnath, Piprahwa, Kuśīnagara, Vaishali, Sanchi, Nagarjunakonda, and of the caves in Nasik, Karle, Junnar, etc. "With one possible but very doubtful exception there is not a single example at Taxila of *saṅghārāma* erected within the walls of any of the cities". [135]

In early historic times the town was a strong prop of Buddhism. Artisans and merchants vied with one another in raising votive stupas and putting up pillars in honour of the Buddha at Sanchi and Bharhut. They proudly mention the towns to which they belonged. Nagarjunakonda provides an example of close linkage between urbanism and early Buddhism. The commoners, including merchants, promoted Buddhist construction. Bodhiśri, a lay worshipper, constructed several buildings. Kumāranandin, a *śreṣṭhin*, donated a sculptured frieze to a monastery, and a monastery was renovated by gifts received largely from the merchant community.[136] We have the famous story of the multimillionaire merchant Anāthapiṇḍika of Śrāvastī who spent a total of 540 million pieces of metal money on providing accommodation for the Buddha and his monks at Jetavana-*vihāra*. The land for the monastery cost him 180 million, its construction cost the same amount, and so also its inauguration.[137] Shorn of its exaggeration this story does illustrate the financial support of the city merchants to

[133] *Taxila*, I, p. 230. cf. p. 391.

[134] *Vinaya Texts*, tr. T.W. Rhys Davids and Hermann Oldenberg, *SBE*, XIII, p. 143.

[135] *Taxila*, I, p. 231.

[136] H. Sarkar, "Some Aspects of the Buddhist Monuments at Nagarjunakonda", *AI*, no.16, 1960, p. 77.

[137] *s.v.* Anāthapiṇḍika, G.P. Malalasekera, *Dictionary of Pāli Proper Names*.

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Buddhism. The purchase of Jetavana was depicted at Sanchi, Bharhut,[138] Gaya and more extensively in Amaravati relief, so that it could inspire other merchants to act similarly. Buddhism promoted moneylending by asking debtors to pay. Tips for success in trade were taught by the Buddha.[139] The Mahāyanist *avadāna* texts confirm the close relation between traders and Buddhism. Naturally when ancient towns declined the neighbouring monasteries declined. In the absence of alternative sources of support the old monasteries faded away. Since monasteries were concrete and physical articulations of Buddhism, their decline attracted the special attention of the Chinese pilgrims, Fa-hsien and especially of Hsüan Tsang.

Small monasteries, which formerly existed in the vicinity of towns, became mostly derelict. Large structures, called *vihāras* or *mahāvihāras*, sprang up independently of towns in Gupta and post-Gupta times. The inmates living in these walled and self-contained structures were given villages to support them. Grants of plots of land to the Buddhist church or groups of monks were made by the Sātavāhana princes in western India in the second century AD, but the practice spread in other parts of the country and assumed gigantic proportions in early medieval times. Buddhist monasteries in Bangladesh, and in parts of eastern, northern and southern India were supported by land grants in early medieval times. Some important instances could be given. An exceptionally large monastery, nearly 550 sq. ft. with 115 cells, at Mainamati (Paṭṭikera), five miles west from Comilla,[140] was apparently maintained by land grants. A copperplate of the Buddhist king Bhavadeva (*c.* eighth century) granted lands to the *ratna-traya* of the Veṇḍamati-*vihārikā*.[141] Such donations may have been made to the main monastery under the Buddhist kings of the Candra dynasty (*c.* 900-1050).[142] The Paharpur monastic complex in Rajshahi district, with Somapura *vihāra* as its centre, could have been similarly supported. This might be the case also with Raktamṛtikā-*vihāra* discovered at Rajbadidanga, identical with Karnasuvarṇa.[143] A considerable monastic settlement discovered at Antichak in Bhagalpur district and considered identical with Vikramaśilā may have been assigned villages. Although only one mound out of nine has been excavated with 204 cells exposed, along with the monks and their attendants the total population would have consisted of one thousand people in the exposed monastic and temple establishment.[144] For Nalanda, which accommodated ten thousand monk

[138] *s.v.* Jetavana, ibid.

[139] R.S. Sharma, *Material Culture and Social Formations in Ancient India*, pp. 125-26.

[140] Debala Mitra, *Buddhist Monuments*, p. 243. [141] Ibid., p. 245. [142] Cf. Ibid.

[143] S.R. Das, *Excavations at Rājbāḍīdāṅgā: 1962*, pp. 6,8.

[144] *IAR, 1975-76*, pp. 6-7; *1976-77*, p. 11; *1978-79*, p. 43. Also based on reports shown to me by B.S. Jha, S.K. Chaudhury and Vijay Singh of the Vikramasila Project.

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students, the evidence for grants of villages is clear and definite. According to Hsüan Tsang, the great monastery (*mahāvihāra*) of Nalanda enjoyed as many as one hundred villages granted by earlier kings;[145] I-tsing raises this number to more than two hundred villages.[146] At the request of the Sumatra king Balaputradeva, Devapāla granted five villages to Nalanda.[147] In eastern India Bodh Gaya was the greatest religious centre of the Buddhists, although it lacks large monastic structures. According to Dharmasvāmin twelve *vihāras* or monasteries existed here in the first half of the thirteenth century.[148] Jayasena, who was called Pīṭhipati and *ācārya* like his father Budhasena, donated a village to the Vajrāsana (Bodh Gaya temple) and placed the charter in the hands of the monk Mangalasvāmin, a native of Sri Lanka.[149]

Several examples of land grants to monasteries in Orissa are known. A copperplate of about the first half of the sixth century records the grant of a village for establishing a *vihāra* or monastery at Bodhipadraka, for arranging the ceremonial worship of the good Ārya-Avalokiteśvara and also for meeting necessities of the monks, who had to be supplied not only with food, cloth, medicine, etc., but also with attendants.[150]

Excavations show that Ratnagiri, about forty-five km to the south-west of Cuttack, was a monastic establishment comparable to Nalanda.[151] It had two large monasteries although some other monasteries existed in the vicinity of Ratnagiri. All those were obviously supported by land grants. For example, two Bhauma-Kara charters (about the middle of the tenth century) from Talcher in Dhenkanal district record the donation of two villages for the temple of the Buddha in Jayāśrama-*vihāra*. The rent was divided into three shares. One-third was meant for performing the ceremonial worship of the Buddha image which involved arrangements for lamp, incense, perfume, flowers, etc., together with offerings meant for *bali, caru* and *naivedya*.[152] Evidently out of the same share the monks and their ten attendants were provided with food, bed, clothing, medicine and food bowl.[153] The second one-third share was reserved for repairs,[154] which would cover the procurement of building material as well as payment to masons, artisans, etc., employed for the purpose. Repair and maintenance of the building were apparently considered quite important, for they claimed one-third share of the income from villages. The remainder

[145] Beal, *Records*, II, p. 118.

[146] Takakusu, *A Record of the Buddhist Religion*, pp. 65, 154.

[147] *EI*, XVII, no.17, ll.24-40. [148] Debala Mitra, *Buddhist Monuments*, p. 223

[149] Ibid., pp. 225-27. [150] Ibid., p. 227. [151] Ibid., p. 232

[152] Debala Mitra, *Ratnagiri*, I, pp. 19-20.

[153] Ibid., fn.2. The term *dāsānām bhiksunām* has been suggested as the correct reading.

[154] Debala Mitra, *Ratnagiri*, I, pp. 20.

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one-third share was meant for the maintenance of the family of the benefactor (*dānapati*), presumably the person who built the temple.[155] Later towards the end of the eleventh and the beginning of the twelfth century we find a Somavaṃśi charter of three copperplates granting a village to Rani Karpūraśrī, who hailed from Saloṇapura-*mahāvihāra*, thirteen miles from Ratnagiri. The find of the copperplates at the Ratnagiri mound suggests that the queen passed her retired life at Ratnagiri.[156] Similar grants may have been made to the two monasteries at Ratnagiri.

In eastern Uttar Pradesh monasteries at Kasia or Kuśīnagara in Deoria district, and at Sarnath, may have been supported by land grants. But so far we have no epigraphic records of these grants. However Jetavana-*vihāra* at Śrāvastī, where Hsüan Tsang found most buildings in decay, was given grant for its maintenance. The Gāḥaḍavāla ruler Govindacandra issued in 1130 a copperplate charter, according to which six villages were granted to the monks of Jetavana-*mahāvihāra*.[157]

Although south India is well known for numerous land grants to brahmanical temples, several grants to Buddhist establishments can be cited. The Paliyan plates (*c.* 868) of Varaguṇa of the Vṛṣṇikula begin with the Buddhist invocation and record grants of land to the Bhaṭṭāraka of Tirumūlavādam.[158] A record of 1065 commemorates the establishment of a monastery at Balligava by a minister who made grants for the monasteries (*vihāra*) and also for Tārā, Lokeśvara and the Buddha with their attendant deities.[159] In the deep south, in Tamil Nadu, according to the large Leiden plates of 1006, Rājarāja granted a village to the Buddha residing in the Cūḷāmaṇivarma-*vihāra* at Nagapattinam.[160] Since the village was granted to a temple in the *vihāra*,[161] the monastery could benefit from it.

The implications of numerous grants of lands and villages to Hindu temples in south India, particularly in Tamil Nadu, have been discussed in several publications.[162] These grants supported the huge temple populations in such large religious shrines as Tirupati and Thanjavur. The numerous petty officials, artisans, and attendants received plots of land as maintenance grants from the temple, which itself was a great landed beneficiary.[163]

The most striking example of how huge temple populations were maintained is provided by Somanātha in Gujarat. The idol of Somanātha was the king while other idols were merely his door-keepers and chamberlains.

[155] Ibid. [156] Debala Mitra, *Buddhist Monuments*, p. 232. [157] Ibid., pp. 76-77.
[158] Ibid., p. 192. [159] Ibid., p. 193. [160] Ibid., p. 195. [161] Ibid.
[162] Noboru Karashima, *Aspects of South Indian State and Society;* B.K. Pandeya, *Temple Economy under the Cōḷas.*
[163] B.K. Pandeya, op. cit., chs 3 and 4

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A thousand brāhmaṇas were employed to worship the idol;[164] five hundred singing and dancing girls and two hundred musicians served the temple. Three hundred barbers were employed to shave the heads and beards of the pilgrims who numbered ten million at the time of the solar and lunar eclipses. Obviously for the support of the temple population and meeting its various needs presents came from distant parts. More significantly the princes of Hindustan had endowed it with ten thousand villages,[165] which would be more than sufficient for its maintenance. In the absence of epigraphic evidence this huge figure may be doubted, but not so the grant of numerous villages to take care of the large temple population.

Primarily because of land grants early medieval Hindu temples as well as Jain and Buddhist establishments functioned as self-sufficient economic units in a large measure. The monks could no longer depend on ancient towns, which had either decayed or disappeared. A few towns existed here and there, and in some of them, especially in parts of Rajasthan and western Uttar Pradesh under the Pratīhāras, a part of the sales tax levied on goods including houses was transferred to the temples, but, by and large, big religious establishments practised self-supporting economies based on land grants.

A far more significant consequence of urban decline could be the strengthening of the agrarian economy by the migration of skilled artisans to the countryside. Some of them gave up their age-old profession and took to agriculture. An eleventh-century charter from Assam refers to twenty-four weavers possessing land[166] in the district of Dinajpur.[167] The term used for weaver is *tantrī*. In eastern India tantis are a caste, but they have generally given up weaving and become agricultural labourers. In post-Gupta times a few weavers may have migrated from towns in Puṇḍravandhana or the Bogra area, and later because of increase in numbers they may have taken to agriculture. It has been shown that in this area the *carmakāras* also had adopted agriculture. In general the village artisans serviced the peasants. The new skill and on-the-spot help of the craftsmen could boost the agricultural yield and support more mouths.

Urban decline led to the regrouping and reorganization of social relationships, albeit within the broad ideological framework of the *varṇa* system. Guilds fossilized into castes.[168] On account of the scarcity of markets and moneyed consumers urban occupations came to be viewed with contempt.[169]

[164] Mohammad Habib, *Sultan Mohmud of Ghaznin*, pp. 52-53.
[165] Ibid.
[166] D. Sarma, ed. Texts, *Kāmarūpaśāsanāvalī*, pp. 130-31.
[167] Ibid., pt.I,p.79.
[168] R.S. Sharma, *Social Changes in Early Medieval India (c.AD 500-1200)*.
[169] R.S.Sharma, *Śūdras in Ancient India*, Appendix 2.

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We may appreciate the change in the relationships of the artisans with those whom they serviced, if we consider their position in ancient times. In earlier times artisans were broadly divided into three categories:

1. scattered families of artisans living in villages (*grāmaśilpins*)[170] and serving the agriculturists;
2. organised artisans forming their own settlements such as those of smiths and carpenters[171] (mainly suburban villages); and
3. artisans living in towns.[172]

The first category shows two types: those who worked at their own residence and those who worked at the residence of the employer for wages.[173] The second category apparently took their products to towns or executed orders for supply of commodities or worked at the residence of urban and rural employers for wages. According to the *Arthaśāstra* of Kauṭilya various types of specialized artisans lived to the north and west of the royal palace.[174] Further, according to it they were organized into guilds, and their wages, which were to be paid in cash, were regulated by the state.[175] We hear of some artisans attached to the king or affluent merchants,[176] but this seems to have been an urban phenomenon. These artisans were neither paid by land grants nor at harvest time. The overall system under which they earned their livelihood cannot be called *jajmānī*. Independent artisans working on their own and selling their products existed in villages, and for their labour and products they could have been paid either in cash or in kind. In general urban and rural artisans seem to have enjoyed considerable autonomy, though they may have been supplied with the raw material either through the state or by the people who needed artisanal products and services.

With the rise of towns artisans naturally conglomerated there, and affluent sections of villagers and even ordinary peasants may have purchased the necessary tools and household equipment with money. But with urban decline and dispersal of artisans and merchants, the situation would change. Artisans would migrate to the countryside. Once they settled in a village they were attached individually and collectively to its higher caste landed magnates and ordinary peasants. They became an integral part of the *jajmānī* system in which they were remunerated by land grants or payment in kind at harvest time. They lost spatial and occupational mobility, and in this respect they were not better than serfs.

[170] *Pāṇini*, VI. 2.62.
[171] R.S. Sharma, *Śūdras in Ancient India*, p. 100.
[172] Ibid.
[173] *Pāṇini*, V.4.95. This refers to *takṣa* or carpenter.
[174] *AŚ*, II.4.
[175] R.S. Sharma, *Śūdras in Ancient India.*, pp. 167-78.
[176] Ibid., pp. 99-101.

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In a word the decay of early historic towns created conditions for the emergence of the classical feudalism. Loss of substantial income from towns was an important factor which compelled the state to set up landed beneficiaries in the countryside and to delegate law-keeping functions to them. Equally it forced the state to lean heavily on vassals and landed magnates for the supply of soldiers at war time. The professional soldiery was superseded by the feudal soldiery. Urban decline led to the migration of a good many brāhmaṇas to rural areas where they lived on the income from the land donated to them by the chiefs and princes. The artisans dispersed in the countryside where they served their patrons in return for land grants or fixed payment in kind at harvest time. Several types of craftsmen founded their migrant guilds and apparently served patrons in the adjacent villages. Others such as weavers (*tantris*) and leather workers (*carmakāra*) became marginal peasants and agricultural labourers.

Artisans who served religious and political establishments ceased to be full-time specialists. The assignment of land for their service compelled them to take to agriculture. There were also shifts in the nature of the trades they followed. They produced for temples and monasteries goods of a ritualistic nature, especially a large number of bronze images. Manufacture of arms became a very important craft to meet the needs of numerous vassals who maintained their own soldiers. But the early Middle Ages witnessed great rural expansion,[177] which presupposes an increase in the number of craftsmen and in the volume of craft production in the country as a whole.

Merchants were ruralized inasmuch as they earned their living by managing land. Professionals and various kinds of state functionaries came to be paid through land grants. The identity of the decaying towns was maintained by converting them into places of pilgrimage. But early medieval religious, and military and administrative establishments, though non-agriculturist in nature, were not so much centres of technology, craft production and commodity exchange based on money as centres of consumption. They were marked by a closed economy, in which their basic needs, i.e., food, clothing, residence, etc., were met by the villages granted to them and the artisans attached to them. According to foreign accounts, two hundred villages were given in grant to the monastery of Nalanda and ten thousand to the temple of Somanātha. Land grants and dispersal of townsmen in the countryside served as a great stimulus to agrarian expansion in the post-urban era.

[177] Infra. ch.10.

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10

Agrarian Expansion

Literary texts, foreign accounts, explorations and excavations, and spread of coins and inscriptions indicate that the upper and middle Gangetic plains, Malwa, the coastal area of Gujarat, western Deccan, the Krishna-Godavari basin, the Kaveri basin, the coastal belt of Kalinga and some coastal areas of West Bengal were fairly well settled by the third century AD. Even by the third century large parts of Assam, West Bengal, Orissa, northern Andhra Pradesh, eastern Madhya Pradesh, Vidarbha, good portions of Rajasthan, Gujarat and Karnataka, the inland areas of Tamil Nadu, and Kerala did not enter the historical phase on any scale. The same seems to be true of the Himalayan zone. Although the process of founding historical settlements in these areas was gradual, the period *c.* 400-650 seems to have been particularly important for the rise of new states or kingdoms. Leaving out the imperial states of the Guptas, in this period we can count sixty-nine states spread all over the country.[1] Out of these, forty-eight could be attributed to Maharashtra, eastern Madhya Pradesh, Andhra Pradesh, Orissa and Bengal.[2] In a way the area in which these states are found formed a continuous zone with gaps. A good part of the zone was a forested plateau largely included in the Vindhyan region. The 'eighteen forests' (*aṣṭādaśāṭavī*) covered a large portion of central India. Except in such areas as north and deltaic Bengal and small riverine tracts in the Deccan and the south, red soil predominated in the unsettled area.

It is in this continuous area that land grants supply evidence of the rise of forty-eight states. They leave no doubt that these kingdoms raised regular taxes from the peasants and maintained coercive mechanisms manned by regular and irregular soldiers called *caṭa* and *bhaṭa*. *Caṭa* or *cāṭa* means a member of the police or an irregular soldier and *bhaṭa* or *bhāṭa* means a regular soldier. Officials to whom grants are addressed are specified by designations and sometimes even by names, and the fiscal and administrative jurisdictions in terms of territory are particularized. In some grants, for instance, in a fifth-century Vākāṭaka grant, treasury (*kośa*) and professional army (*daṇḍa*), which were indispensable to the

[1] This is based on the R.C. Majumdar, ed., *Comprehensive History of India*, vol. III, pt. I.
[2] Ibid.

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state, are also mentioned.[3] The idea that the state consists of seven elements also occurs.[4]

Some of these states in eastern and central regions and in the south were humbled by Samudra Gupta, but most rulers were reinstated on the condition of carrying out certain feudal obligations. The clear presence of numerous states is indicated by their grants in the fourth, fifth and subsequent centuries. It is obvious that most of these states arose in those regions which had neither evolved their own systems nor had directly experienced the working of the other systems. Clearly the states could not have arisen without a sound agrarian base in each region. The organized agrarian base of the kingdoms is evident not only from the various items of land revenue but also from the names of numerous villages mentioned in land charters. Some villages are objects of grant, and others are mentioned as demarcating boundaries.[5] Agricultural products of these villages are not listed in early grants, but they appear much later in the Candella grants from eastern Madhya Pradesh.

The point has been made[6] that the land grants opened virgin land to cultivation in Bengal and elsewhere.[7] This obviously is done on the basis of the use of the terms *khila, aprahata, avanirandhra* and *bhūmicchidranyāya*, which indicate grant of uncultivated land.[8] The term *apakṛṣṭa* is used in land charters from Assam. When cultivated and settled areas were made over, many of these terms continued to be used as a matter of convention in Gujarat, Maharashtra and Madhya Pradesh.[9] After we have made allowances for the conventional use of set phrases in land charters, numerous instances still suggest the virgin character of the land. Many village names sound non-Sanskritic in Sanskrit inscriptions. Even where village names are Sanskritic and the terms indicating virgin land are not used in grants, backward villages may have been given away. This may be the case with the grants of Śarabhapūriya and Pāṇḍu kings in the Chhatisgarh or south Kosala area. The term *aṣṭādaśāṭavī-rājya*, i.e., 'the kingdom of the eighteen forests', is mentioned in several grants.[10] There is a clear reference to the land being situated in a forest in the Tipperah grant of Lokanātha in 650.

[3] D.C. Sircar, *Select Inscriptions*, I, BK III, no. 62, ll. 11-12.

[4] Ibid., ll. 40-41.

[5] The exercise of identifying and plotting both types of villages on a map should prove rewarding. It will better indicate the pattern of agrarian settlements.

[6] P.C. Chakravarti in *History of Bengal*, ed., R.C. Majumdar, pp. 648-49; D.D. Kosambi, *An Introduction to the Study of Indian History*, pp. 291-96.

[7] D.D. Kosambi, op. cit., pp. 291-96.

[8] These terms are discussed in R.S. Sharma, *Indian Feudalism*, pp. 30-32.

[9] Ibid., pp.30-32

[10] D.C. Sircar, *Select Inscriptions*, I, BK III, no. 50, l. 8, also see p. 395, fn. 3.

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The forest area containing the land endowed to more than one hundred brāhmaṇas is described as "having no distinction of natural and artificial, having a thick network of bush and creepers, where deer, buffaloes, bears, tigers, serpents, etc. enjoy according to their will, all pleasures of homelife".[11]

Instances of land grants made to numerous brāhmaṇas through the same charter[12] in backward or less developed areas are many. The Nidhanpur copperplates of Bhāskarvarman speak of land grants to more than two hundred brāhmaṇas in the Sylhet region, now in Bangladesh, during the seventh century.[13] That the brāhmaṇas were settled *en masse* in the same region is shown by the grant of four hundred *pāṭakas* of land to six thousand brāhmaṇas in the tenth century.[14] It is estimated that this donated land measured six thousand acres.[15] Although the terms of the grant show that this block of land was settled, the grant was made according to the maxim of bringing virgin land under cultivation (*bhūmichhidranyāya*). The result of settling so many brāhmaṇas would be not only to strengthen state authority in the area of Sylhet but also to develop the area agriculturally.

The donation of land in a backward area created obvious possibilities for the expansion of agriculture. A new expertise was brought by the priestly and the other beneficiaries who migrated from the middle Gangetic plains or similar advanced areas in search of better livelihood. For example, they introduced the knowledge of calendar,[16] which could impart a good idea of the rainy, sowing seasons, etc. Much of the material dealing with agriculture in the *Arthaśāstra* of Kauṭilya and the *Bṛhat Saṃhitā* of Varāhamihira may have been diffused by these migrants. The tribals were beaf-eaters and killed the cattle indiscriminately. The brāhmaṇas inculcated the idea of the preservation of the cattle wealth which naturally gave a boost to agrarian economy. The ideological nature of the *varṇa* system also contributed to agrarian expansion. Since the brāhmaṇas had to organize production themselves, they needed ploughmen and cultivators. The idea of inferiority and superiority embedded in the *varṇa* hierarchy could enable them to mobilize the tribals and fringe 'Hindus' for this. Further, the

[11] *EI*, XV, no. 19, ll. 27-50.

[12] B.P. Mazumdar, "Collective Landgrants in Early Medieval Inscriptions (*c.* 606-1206 AD)," *Journal of Asiatic Society*, X, 1968, pp. 7-17.

[13] Dimbeswar Sarma, ed., *Kāmarūpaśāsanāvalī*, pt. II, pp.19-32.

[14] K.G. Chaudhury, "Paśchimbhāg Copper-plate of Mahārāja Śricandradeva (10th century AD)," *N.K. Bhattasali Commemoration Volume*, ed., A.B.M. Habibullah, pp. 166-98, ll.47-51 of the inscription.

[15] D.C. Sircar, *Epigraphic Discoveries in East Pakistan*, pp. 33-35.

[16] R.S. Sharma, *Indian Feudalism*, pp. 222-23.

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Parāśara Smṛti, a law-book of the seventh century, allowed brāhmaṇas to cultivate land. This seems to be a consequence of the fact that a good many brāhmaṇas were granted land.

We find other indications of agrarian expansion in the early Middle Ages. Several texts deal with the founding of villages. As shown earlier, the *Mānasāra*, a text on architecture, gives far more attention to villages than to towns. It classifies them into various categories and defines each category in some detail. The importance of the village looms large in this text. The *Mayamata*, probably a text of Coḷa times,[17] devotes a chapter called the "layout of the village" or the *grāmavinyāsa* to a discussion of the classification of villages.[18] Similarly the *Śilparatna*, which was compiled from 'ancient' texts on architecture in the late sixteenth century,[19] has a chapter dealing with the traits of villages.[20] It is significant that many texts, which contain chapters on the founding of villages, were compiled in south India where agrarian expansion is attested by inscriptions. The *Grāmapaddhati* or the system of the settlement of villages written in the fourteenth century contains much material of early medieval times.[21] It gives us a good idea of how villages were settled in certain parts of Karnataka.[22] It states that traditionally thirty-two villages were founded.[23] Several other texts such as *Grāmavicāra* and *Grāmavāsasāra* lay down the guidelines for founding villages. Evidently they were also written in medieval times.[24]

Grossly exaggerated numbers of villages given in the *Aparājitapṛcchā*, *Skanda Purāṇa* and other early medieval texts speak of increasing rural settlements.[25] The *Skanda Purāṇa* enumerates the number of villages region-wise in as many as seventy regions.[26] On the face of it these numbers appear inflated, and the size and population of a village could differ from region to region.[27] But these numbers leave little doubt about the explosion in rural settlements in the early medieval period, when the status of a king was determined according to the number of villages he possessed.

[17] Cf. *Mayamata*, Première Partie, Edition, Critique, Traduction et Notes, Bruno Dagnes, Pondicherry, 1970, Introd., p. 4.

[18] Ibid., ch.9.

[19] T. Ganapati Śāstrī, ed., *The Śilparatna by Śrī Kumāra*, Preface, p. 2.

[20] Ibid., ch. 5 (*grāmādilakṣaṇam*).

[21] B.A. Saletore, *Ancient Karnataka: History of Tuluva*, I, pp. 341-47.

[22] Ibid., pp. 300-9.

[23] Ibid.

[24] The list of such texts has been prepared by Gy.Wojtiła on the basis of Sanskrit catalogues. But so far none of these manuscripts has been discussed.

[25] The number of villages in various regions has been quoted and discussed in B.N.S. Yadava, *Society and Culture in Northern India in the Twelfth Century*, pp. 234-35.

[26] Yadava, op. cit., p. 234.

[27] Ibid., p. 236. Texts on architecture speak of various categories of villages on the basis of their size.

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It is not easy to estimate the rural population. Hsüan Tsang's figures for Harṣa's army may enable us to speculate on its size in northern India. The Chinese pilgrim tells us that Harṣa maintained sixty thousand war elephants and one hundred thousand cavalry.[28] Each of the two figures is more than three times the number given by classical writers for the Maurya horses and elephants. Hsüan Tsang does not provide the number of Harṣa's infantry. But if the infantry also outnumbered the Maurya foot-soldiers by three times, Harṣa could be credited with eighteen hundred thousand foot-soldiers. The numerical strength of his army, most of which was supplied by his vassals,[29] would safely exceed two million. If ten per cent of people served in the state army or in the armies supplied by the vassals, the total population of northern India would work out at twenty million. By the same token the population of the country in Maurya times works out at around six million. The figures for Harṣa's army therefore suggest rapid increase of population in northern India. Since towns generally show decline in the seventh century this could be seen as nothing else than an explosion of the population in the countryside. And it is impossible to think of such an explosion without tremendous agrarian growth.

As has been shown earlier, urban contraction was an important cause of agrarian expansion. Western India provides many examples of migrations of town-dwelling brāhmaṇas to the countryside where they were donated land by the ruling class.[30] In the settled villages their advent would boost production because of the increasing burden of rent on the peasants. This factor could also push production in backward regions which would additionally benefit from the introduction of better knowledge of agriculture by the beneficiaries. Agriculture would also benefit from the ready availability of artisans migrating from decaying towns.

Several texts on agriculture such as *Kṛṣiparāśara* in the north and Kamban's book in the south were composed in early medieval times. Kāśyapa's *Kṛṣisūkti*, though found in the south,[31] could be a work of a paddy-producing area either in the north or the south. The *Vṛkṣa Āyurveda* of about the

[28] *Si-Yu-Ki*, I, p. 213.

[29] *samastasenā-mukuṭamni-mayūkh-ākrānta-pād-āravindaḥ*, The Aihole Inscription, verse 23.

[30] The names of the towns from where the brāhmaṇas migrated to the countryside in western India appear in the Appendix 1. But the places from where the brāhmaṇas migrated in other parts of the country during the period from the fourth to the eighth century have to be listed and identified.

[31] Gy.Wojtilla, ed., *Kāśyapīyakṛṣisūkti*, *Acta Orientalia Academiae Seientiarum Hung*, XXXIII (2), 1979, pp. 209-52. The usual term for cultivator in this text is *kṛṣīvala*, which occurs in early medieval texts and inscriptions. Most of the material in this work probably belongs to medieval times, and its core is placed in the eighth-ninth centuries (Wojtilla, tr., op. cit., XXXIX (1), 1985, p. 85, fn. 1.

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tenth century recommends recipes for treating the diseases affecting the plants.[32] Apart from special attention being given to horses,[33] which were in great demand by chiefs and princes for their cavalry and personal use, animal husbandry was improved because of advances made in the treatment of cattle disease.[34] In addition, detailed instructions regarding agriculture appear in the *Bṛhat Saṃhitā* of Varāhamihira, the *Agni Purāṇa* and the *Viṣṇudharmottara Purāṇa*.[35] Three crops, first mentioned by Pāṇini, were known widely[36] and better seeds were produced.[37] Mateorological knowlege, based on observation, was far advanced in the *Kṛṣiparāśara*. The knowledge of fertilizers improved immensely, and the use of the compost was known.[38] Some other innovations in agricultural techniques may be noted. The *bṛhadhala* or big plough mentioned in a tenth-century inscription from the Ajmer[39] area may have been an important instrument in breaking difficult soil in certain parts of the country. Equally advantageous to agricultural processes may have been the use of the pounder, which was in use in Pāla times.[40]

More importantly, irrigation facilities were expanded. The law-books lay down severe punishments for those who cause damage to tanks, wells, ponds, embankments, etc.[41] The construction of *vāpī* (step well) became very popular in Rajasthan and Gujarat. Its importance is also underlined in the work of Kāśyapa.[42] V.K. Jain has prepared a map in which he has shown the distribution of the *vāpīs* in western India in the eleventh-thirteenth centuries.[43] *Vāpīs* of the tenth and eleventh centuries are also found in good numbers in the Mehrauli area of Delhi. It is interesting to note that the term *vāpī* is derived from the Sanskrit root *vap* which means 'to sow'. Clearly step wells were meant for irrigating the fields, but they would be equally useful for supplying drinking water and also for irrigating gardens. Further, the use of *araghaṭṭa* or the Persian wheel had become widespread in the ninth-tenth centuries, particularly in Rajasthan. The

[32] D.M. Bose et al., eds., *A Concise History of Science in India*, p. 362.

[33] Ibid., p. 255. [34] Ibid., pp. 363-64.

[35] Ibid., pp. 358, 361, 363. *The Agni Purāṇa* belongs to the ninth-tenth centuries. The *Viṣṇudharmottara Purāṇa* is attributed to the eighth century.

[36] D.M. Bose et al., op. cit., pp. 356-361. [37] Ibid., pp. 358-59.

[38] Ibid., pp. 358-60.

[39] B.P. Mazumdar, "Industries and Internal Trade in Early Medieval North India", *JBRS*, XLV-XLVI, 1979-80, p. 231.

[40] Discovered in the Pāla stratum of Taradih and reported orally to me by A.K. Prasad.

[41] These texts belong to the early centuries of the Christian era. See R.S. Sharma, *Light on Early Indian Society and Economy*, pp. 90-91.

[42] Gy. Wojtilla, ed., op. cit., pp. 219-20.

[43] "Trade and Traders in Western India", unpublished Ph.D. thesis, University of Delhi, 1983.

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Kṛṣisūkti of Kāśyapa prescribes that the machine for lifting water (*ghaṭī-yantra*) is to be operated by men, oxen or elephants.[44] The use of the term *ārahaṭṭiya-nara* in a lexicon of the twelfth century shows that certain persons were employed to work the water-wheel.[45]

Of course the use of iron implements attained a new peak in this period. In the *Paryāyamuktāvālī*, a medieval lexicon whose manuscripts have been found in West Bengal and Orissa, as many as half a dozen types or grades of iron are mentioned.[46] Above all, iron artefacts were manufactured in plenty. They were used as beams for holding the roof, and also as memorial pillars which evidently was a non-utilitarian purpose. Several pillars, including the Mehrauli pillar in Delhi, were erected to mark the conquest of victorious princes.

The increase in the number of the varieties of cereals including rice, wheat and lentil as well as in fruits, legumes, vegetables, etc., is striking. These can be inferred not only from the *Amarakośa* but more so from the *Paryāyamuktāvalī*.[47] According to the *Śunya Purāṇa* more than fifty kinds of paddy were cultivated in Bengal.[48] It will thus appear that introduction of new crops, expansion of irrigation facilities and innovation in agricultural techniques contributed to the growth of agriculture.[49]

It seems that agriculture and agrarian settlements in the Middle Ages received special attention from the rulers, landed beneficiaries, and immigrant artisans. The knowledge of irrigation techniques, paddy transplantation, preparing fertilizers, weather conditions based on observations, various kinds of cereals as well as some other aspects of agriculture was systematized and diffused in various parts of the country.

[44] Gy. Wojtilla, ed., op. cit., verses 167-68. The *ghaṭī-yantra* operated by oxen is considered to be the best, that by men to be the worst, and that by elephants to be of the middling quality.

[45] B.N.S. Yadava, *Society and Culture in Northern India in the Twelfth Century*, p. 259.

[46] The text was edited by T. Chowdhury in *JBRS*, XXXI, 1945 and XXXII, 1946. The earliest ms. used by him belongs to 1851-62. Composed by Haricaraṇasena, the text is based on the *Paryāyaratnamālā* of Mādhavakara (*JBRS*, XXXI, 1945, Introduction, p. i). Since it is strikingly indebted to Amara in chs. 22, 23 (ibid.) and since potato and tobacco are not mentioned in it, it seems to be pre-Mughal. The synonyms for iron and other metals are found in ch. (*varga*) 6 (*JBRS*, 1945).

[47] T. Chowdhury, op.cit., ch. 18 (*JBRS*, XXXI, 1945, pp. 31-33) speak of 24 types of *śimbīśukadhānyagaṇa* (p. 33), but the varieties, when counted, come to nearly 110 types of cereals including wheat, barley, lentils, etc. ch. 19 (ibid., pp. 33-34) speaks of ten types of *śālidhānya* (transplanted paddy) and nineteen types of *tṛṇaśālidhānya* (untransplanted? paddy), but, on counting, various types of paddy and allied cereals come to nearly sixty-four.

[48] T.C. Dasgupta, *Aspect of Bengali Society*, pp. 249-50 quoted in B.N.S. Yadava, op.cit., pp. 258, 305 fn. Yadava has cited several other pieces of evidence, pp. 258-59.

[49] This point has also been discussed in R.S. Sharma, "How Feudal was Indian Feudalism", *The Journal of Peasant Studies*. Special Issue on Feudalism and Non-European Societies, XII (2-3) 1985, pp. 19-43.

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It would appear that indications of agrarian expansion in the early medieval period are many. But the most striking feature is the rise of nearly fifty states, each with an agrarian base. In this period we hardly know of any state which owed its existence to trade considerably or significantly. We may therefore suggest that in the country as a whole the agrarian sector broadened immeasurably. The urban shrinkage indeed cannot be equated with the overall contraction of economy in the country; rather it was accompanied by unprecedented agrarian expansion. The two together created a congenial atmosphere for the rise and growth of classical feudalism distinguished by the dominance of the landlords and the subjection of the peasantry.

Land grants not only contributed to agrarian growth but also shaped the social configuration in the countryside. They altered the character and composition of the peasantry. The induction of the beneficiaries armed with numerous fiscal and administrative rights lowered the status of the peasants in general. The *gahapatis* were reduced to the position of *kuṭumbins*[50] or ordinary peasant householders, who are often informed of the gifts of land/villages in the charters. The first occupied a higher and the second a lower status. This distinction can be inferred from their respective images in medieval times when the family head was called *gṛhapati*, and the wife *kuṭumbinī*.[51] Early medieval sources suggest a slow but continuous degradation of the *gṛhapati* class. It is held that most *gahapatis* were degraded although some were upgraded.[52]

We notice various other symptoms of differentiation in the countryside. In earlier times brāhmaṇas and kṣatriyas were entitled to taxes, gifts and some other privileges, but elderly people were regarded highly. Aged, elderly persons of the village, i.e. *grāmavṛddhas*, are mentioned in the *Arthaśāstra* of Kauṭilya and in the *Smṛtis*. Members of the two upper *varṇas* continued to enjoy high status, but elderly persons of the village, apparently peasants, were now superseded by a different category comprising 'greater' or 'greatest' men called respectively *mahattara*[53] and *mahattama* in land grants. The two terms are loosely rendered as village elders, but really these signify high ranks, which comprised 'the great men' of the

[50] T. Yamazaki, op.cit.

[51] Gy.Wojtilla, *Les Communautés Rurales*, Troisieme Partie, Asie et Islam, Paris, 1982, p. 125.

[52] T. Yamazaki, op.cit.

[53] The various modern caste titles such as Mahto, Mahtha, Malhotra, Mehra, Mehrotra, Mehta, Mehtar, etc., are all derived from the term *mahattara*. These titles mostly belong to intermediate castes such as vaiśya or banias. In the initial stages the title *mahattara* was mainly prevalent among the high ranking vaiśya peasants, but later even when the vaiśyas became mainly confined to trade, the title and its derivations struck to them in northern and western India.

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villages. Probably as village headmen they looked after fiscal and administrative matters. Ranking among the peasantry was now based on fiscal and administrative authority and not mainly on birth. The village elders or headmen were apparently qualitatively and functionally different from the general run of cultivators or peasants who ordinarily belonged to low castes and were the actual tillers of the soil. These were therefore called *kṣudraprakṛti kuṭumbinaḥ*.[54]

If these village elders and peasants are seen *vis-à-vis* the various levels of beneficiaries, they give us a clear idea of hierarchy, of subinfeudation in the countryside. Even in early medieval times we hear of five grades of peasants who included possessors of ten ploughs (*daśahalī*) and those of one hundred ploughs (*śatahalī*). The first might cultivate fifty to one hundred acres, and the second could go up to even five hundred acres, or more. In such cases the capacity to cultivate would differ according to the nature of the soil. Although this kind of symmetrical categorization of peasants might sound conventional, it does indicate several layers of peasantry. How these layers were connected with the process of subinfeudation we have no means to ascertain. We learn for example that the owners of ten ploughs (*daśahalī*) employed farm labour. The later practice according to which the ploughman was given a piece of land for his bare subsistence and compelled to plough on hereditary basis may have started in this period.

The support of the upgraded and better-off peasants could be enlisted by the beneficiaries in collecting various dues from the rural folk. But the extent of this collaboration is not known. On the other hand excessive and undefined fiscal powers enjoyed by the beneficiaries[55] created the possibility of disputes and conflicts between them and the peasants. The peasants in the donated lands were therefore repeatedly asked by the royal donors to carry out the orders of the beneficiaries.[56] Of course they were indoctrinated by the beneficiaries to produce and pay on religious grounds. Similarly since royal agents and policemen were not allowed to enter the donated villages, the beneficiaries were free to set up their own mechanism of coercion. Furthermore fiscal and agrarian disputes in the law-court were to be apparently solved through the assertion of the supremacy of royal charters (*rājaśāsana*) over all the other sources of law such as religion, contract and custom. And above all, the village community comprising peasants and landlords may have been kept together through the bonds of kin, caste, religion and territory. But despite all these devices sources of conflict and tension were not lacking.

[54] S.K. Maity and R.R. Mukherjee, *Corpus of Inscriptions of Bengal*, Calcutta, 1967, pp. 58-60, Damodarpur Copper-plate Inscription of the time of Budha Gupta (AD 482), ll. 2-3.

[55] R.S. Sharma, *Indian Feudalism*, ch. 3.

[56] Ibid., pp. 45, 52.

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In the first part of the early Middle Ages (*c.* 600-1000) two distinct trends can be discerned. One is the contraction of towns, and the other is the extension of villages. Rural expansion seems to have been facilitated by the migration of artisans to the country where they formed part of the *jajmānī* system. As supplier of artisanal commodities, towns lost their relevance to the countryside. As seats of fiscal and political power some towns may have dominated villages, but generally village-mindedness may have prevailed over urbanism. Rural seats of power became more important. Many texts gave prominence to the village-mindedness. Village manners, customs and practices became authoritative, and enjoyed the sanction of law and society. Various terms such as *grāmadharma, grāmācāra*, etc. were used to underline the importance of the collective identity of the village. Since the artisanal needs of the villages, and of chiefly, royal and religious establishments were met locally, the growth of the market and artisanal production in separate settlements was stunted. Occasional *hāṭs* or weekly fairs held in villages dominated by pedlars may have eventually grown into towns later. The evidence for the growth of towns and money economy appears in considerable measure since the eleventh century[57] and becomes marked in the fourteenth century.[58]

The six hundred years following the third century saw the expansion of the self-sufficient village and the contraction of the urban sector dominated by crafts and commerce. The economic ties between the village and 'the new town' became unilateral. 'The town' depended on the taxes collected from the villages but contributed very little to its economy. Urban artisans and merchants were not altogether absent, but their guilds had fossilized into castes and they ceased to be important enough to claim power and prestige which rested with the landed magnates. Besides conflict with their overlords, landlords were faced with conflicts and contradictions within their own ranks. They were also confronted by the peasants on various issues.[59] The 'new urban' phenomenon marked by garrisons, palaces, pilgrim centres and temple establishments better suited the landlord and the feudal system of the classical type. It neither posed a threat to the rural aristocracy nor created conditions for the liberation of the struggling peasantry. Such a development naturally detracted from the dynamism of the early medieval period.

[57] R.N. Nandi, *Growth of Rural Economy in Early Feudal India*, Presidential Address, Ancient India section, Indian History Congress, 45 Session, 1984, pp. 50-64.

[58] Tapan Raychaudhuri and Irfan Habib, eds., *The Cambridge Economic History of India, c. 1200 - c. 1750*, vol. I, p. 82f.

[59] R.N.Nandi, *Growth of Rural Economy*, pp. 65-70.

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Conclusion

Towns which were primarily settlements of non-agriculturists distinguished by crafts and commerce, reached the peak of prosperity in the centuries from *c.* 200 BC to *c.* AD 300. There is no doubt that for centuries food was available for the large urban population. The presence of food sellers and confectioners in towns clearly suggests the existence of grain merchants who were termed *vaṇik*. Granaries have been identified at many sites, although much smaller in size than their Harappan predecessors. Some of these may have been meant for storing taxes in kind received by the state officials, but others were evidently run by merchants who sold cereals to the town dwellers in return for payment in cash. The find of coins in the granaries at Dhulikatta is significant. Although the number of coins discovered in excavations may not be large, they have been unearthed at most urban sites. No other period of ancient Indian history is known for so many varieties of coins and so many coin moulds. Indian coins were reinforced by Roman coins. Metal money without doubt was a distinctive feature of the post-Maurya urban life, and it played a vital role in Indo-Roman and probably also in Central Asian trade.

The spurt in handicrafts is equally remarkable in post-Maurya urbanism. Apart from the conventional sixty-four arts and crafts mentioned in Vātsyāyana's *Kāmasūtra,* which is the product of urban conditions, seventy-five occupations appear in the *Milinda-Pañho,* and nearly four dozen occupations, organized into guilds, are described in the *Mahāvastu* in the context of Rājagṛha and Kapilavastu. The *Mahāvastu* mentions altogether more than one hundred occupations, mostly of artisans and merchants, in each of the two capital cities of Rājagṛha and Kapilavastu. The post-Maurya period was noted for great technological progress. This seems to be the period when the Indians learnt the art of feeding silkworms on mulberry leaves. Although this cannot be attested archaeologically, the production of textiles and the dyeing can be inferred from several dyeing vats found in south India so well as from many inscriptions referring to weavers. Similarly Roman reaction against heavy price paid for Indian cutlery can be linked to production of iron goods as evidenced from various types of furnaces and huge quantities of slag unearthed at many urban sites. But many more iron goods, particularly

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tools and weapons, were evidently supplied to soldiers, artisans and agriculturists. The Deccan urban sites are particularly rich in iron objects.

Advanced ironwork substantially contributed to various crafts including bead making and ivory manufacture. Several urban sites show factories for preparing beads and bangles of shell. Beads of semiprecious stones were manufactured particularly in central, western and peninsular towns of the country. These costly beads were exported to South-East Asia. The use of iron tools enabled craftsmen to produce sophisticated ivory objects, which appear in numbers in Begram although only one item, the famous Pompeii statue, has been reported from Italy. There is no doubt that many towns were centres of glass manufacture, which evidently reached its peak in post-Maurya centuries on account of the acquisition of the knowledge of glass blowing by Indians. Although glass factories have been found at many places including that of Kopia, only beads and bangles were manufactured in Indian towns. Bottles and utensils were manufactured at Taxila, but this was evidently due to Hellenistic influence.

It therefore seems that craft production together with local and long-distance trade in costly goods and the availability of agricultural products from the hinterland boosted urbanization in post-Maurya centuries. Numerous seals and inscriptions attest the growing importance of artisans and merchants who were great benefactors of Buddhism. Increasingly the influence of an urban milieu is reflected even in the art of the period which produced numerous pieces of terracotta and sculpture in stone.

Urban centres in Punjab, Haryana and western Uttar Pradesh generally suffered sharp decline after the third century. This is true of Sanghol, Hastināpura, Atranjihera, Mathura, and several other places. Even explorations show a clear gap between the cultural deposits of the Kuṣāṇa epoch and that of the Sultanate period at numerous sites in the Indo-Gangetic Divide and the upper Gangetic plains. In the middle Gangetic plains during Gupta times the trend towards sharp decline or desertion is noticed at many sites including Śrāvastī, Kauśāmbī, Ganwaria, Khairadih, Manjhi, Chirand, Katragarh, Rajgir, etc. Tamluk and Chandraketugarh in West Bengal and Sisupalgarh in Orissa fall in a similar category.

In Madhya Pradesh, Rajasthan and Gujarat also, after the third century, decay starts at many places including Noh, Ujjain and Nagar. Desertion in or after the third century AD occurred at most urban centres in Maharashtra. Pauni, Kauṇḍinyapura, Nevasa, Ter, Bhokardan, Paithan, Nasik, etc., were such towns. A similar position obtained at Vadgaon-Madhavapur and other sites in Karnataka. All these sites are called Sātavāhana urban centres, which started a century before the rise of the Sātavāhana power but faded out soon after its fall in the third century. This is true of the majority of towns in Andhra Pradesh. It also applies to Arikamedu and some other towns in Tamil Nadu.

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Thus it will appear that the Kuṣāṇa and Sātavāhana urban centres suddenly declined in the second half of the third or during the fourth century. This marked the first stage in urban decay, which overlook the majority of early historic towns. It coincided with the fall of the two great kingdoms and the end of the Indo-Roman trade. It also synchronized with the rise of the Gupta power in northern India, with that of the successors of the Sātavāhanas in central and peninsular parts, and with the rule of the Kṣatrapas in western India. The theory that political power extracts surplus from the peasants and others and makes it available to town dwellers is supported in a way by the provision for deliberate urbanization laid down in the *Arthaśāstra* of Kauṭilya, but it may not fully explain the presence of towns under the Kuṣāṇas, Sātavāhanas and their successors. For in the two centuries preceding and succeeding the birth of Christ we find a welter of autonomous states and authorities. This would naturally mean less tax for every state and add to its overhead expenses. Obviously these small states could not ensure security for traders. Collection of customs at numerous points would hamper trade, and yet the towns thrived before the rise of the Sātavāhanas and Kuṣāṇas. However the larger kingdoms set up by these two powers may have collected more taxes and offered security to traders.

But the Gupta empire in India was larger than each of the two kingdoms, and yet its cities and towns show the general trend of decline. Proceeding from east to west and north, Pāṭaliputra, Vaishali, Katragarh, Chirand, Khairadih, Manjhi, Varanasi, Kauśāmbī, Sringaverapur, Ayodhya, Hastināpura, Mathura, Atranjikhera, Sonkh, Purana Qila, Noh, Ropar, Sanghol, etc. show symptoms of decline. Varanasi, Kauśāmbī, Ahicchatrā, and Taxila, though excavated horizontally, provide a picture of decline in various trenches. Chirand and Khairadih which were dug on a considerable scale are marked by rapid decline in Gupta strata. Vaishali also shows decline although a large area pertaining to the Gupta period has been exposed. More significantly, finds from ancient urban sites dug horizontally may be larger in number but not qualitatively better than their counterparts recovered from those which have been excavated vertically. Whether digging is vertical or horizontal it does not make any material difference to the habitational deposit of the fourth-sixth centuries. The sections prepared by the excavators show that mostly this deposit is thinner than that of the first two or three centuries. Although only stray references in literature suggest decline, Varāhamihira's *Bṛhat Saṃhitā* (AD 505) predicts bad days or destruction for towns, traders and craftsmen. Apparently the Guptas and their contemporaries were not capable of giving towns the scale of support which they had enjoyed earlier.

Undoubtedly the decline of long-distance trade which involved Romans, Chinese, Parthians, Kuṣāṇas and Sātavāhanas was an important

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cause of urban decay in the late third century and in the fourth century. The end of the Han, Kuṣāṇa, Parthian and Sātavāhana empires in the third century affected trade which was further diminished by internal dissensions in the Roman empire. But the nature of the relation of trade and politics in the context of India and other countries needs to be worked out. The internal situation of Rome which led to a strong reaction against goods from the East cannot be ignored.

There is no way to assess the loss of income incurred by urban centres on account of languishing trade. We find that Roman coins and goods showed a sudden drop in the third century. Poverty of structures and antiquities both in the north and the south during the post-third centuries bespeak of commercial decline. Loss of trade would mean loss of income to the state, merchants, artisans and others. This could have been made up by boosting production in the hinterland which would depend on technological innovation. But no significant advance occurred in this field in the centuries from the fourth to the sixth and even immediately after. The Harappan decline is sometimes attributed to the wearing away of the landscape, but we at present can only conjecture on the exhaustion of the hinterlands of early historic towns.

The social crisis as reflected in the descriptions of the Kali in the third-fourth centuries appears to be an important factor leading to the decay of towns. The crisis, which amounted to an upheaval in the countryside, was bound to hit the collection of taxes from the peasants and reduce the purchasing power of the priests, soldiers, officials and others who dwelt in towns. This would mean that merchants lost both local and long-distance markets. The social disorder also undermined artisanal activities which centred in towns. Despite the availability of skill and expertise the poverty of the archaeological record in costly objects such as glass goods, ivory objects, beads of precious and semiprecious stones and refined pottery is evident in Gupta and prominent in post-Gupta times. Above all, the paucity of metal money, particularly of gold coins, in the post-Gupta period is a stark reality.

The second phase of urban decay appears after the sixth century, and its beginning synchronizes with the fall of the Gupta empire. This phase was not so widespread as the first one. It covered several important towns in the middle Gangetic plains. Champa, Pāṭaliputra, Vaishali, Varanasi, Bhita, etc., ceased to be towns after the sixth century. The archaeological decline of 'Buddhist' towns after the sixth century is generally attested by the account of Hsüan Tsang and by the lack of such seals and inscriptions as mention artisans and merchants either collectively or individually. It is also confirmed by decreasing attention given to traders and craftsmen in literature. The Buddhist texts of about the first century contain long lists of tradesmen. But, as far as I know, such lists are strikingly absent in early

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medieval texts. Some descriptions of trade and towns in post-Gupta Prākṛit texts appear as conventionalized descriptions which recall earlier times.

The second phase of urban decay is also linked with the decline of trade. Until the fifth century the Byzantium carried on trade with urban centres in India and also in Sri Lanka. Nearly thirty thousand copper coins of the Roman emperor Constantine, found in Sri Lanka, clearly show trade in the fourth century. Byzantine coins ranging up to the fifth century have been found in south India, particularly in Karnataka. But they are certainly not as many as early Roman coins. Hence the view that India's trade with the Byzantium was as flourishing as that with the pre-Byzantine Roman empire is unfounded. Besides spices, silk was an important commodity in the Indo-Byzantine trade in which the Persians acted as intermediaries between China and India on the one hand and the Byzantium on the other. But once the knowledge of feeding silkworms on mulberry leaves was acquired by the Byzantium in the middle of the sixth century silk trade suffered. The silk weavers of Gujarat faced shrinkage of markets even in the fifth century. Similarly evidence for trade between India and South-East Asia during the fourth to the tenth centuries is wanting. Hence increasing decline in long-distance trade accelerated the disappearance of urban centres after the sixth century.

The social upheaval in the third and fourth centuries set in motion a process which feudalized the countryside. This process seems to have been strengthened by another social disorder which is reflected in the *Purāṇic* records of about the seventh century. It became more and more necessary for the rulers to grant towns and villages for the maintenance of priests and officials. The increasing frequency of grants of towns and also of shops and artisanal income after the sixth century adversely affected urban occupations. It curbed the initiative and autonomy of artisans and merchants.

Ancient urban centres were an integral part of the socio-economic formation in which the peasants, artisans and merchants maintained direct bonds with the state. The state itself was based on a system in which the unequal distribution of the agricultural produce in the form of gifts, taxes, tithes and tributes sanctified and promoted by the *varṇa* ideology was far more important than the unequal distribution of land. Taxes brought to towns from the country and those collected from the urban merchants and craftsmen supported the army, officials and men of religion who could perform their functions without being engaged in production directly. In this sense the town accentuated social differentiation. Members of the ruling class lived mainly in towns. With the gifts and salaries that they received the priests, officials, soldiers and others could purchase their necessities from the merchants and obtain goods and services from artisans and labourers. Trade played an important part in internal distribution

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as demonstrated by the use of metal money on a large scale. Although on account of technological limitations these urban centres could not pave the way for the rise of capitalism, they helped sustain the existing system of production and distribution. Guilds of artisans and merchants played an important part in urban economic activities. With urban decay they ossified into castes in medieval times. But, though absent in Greece and Rome, guilds appeared in western Europe in the medieval period and contributed to the advent of capitalism.

Urban decline meant loss of income to the state which suffered more on account of upheavals in the countryside. Since the standing army ate up a major part of the revenue, alternative methods had to be devised to support the soldiery and maintain the administrative apparatus. Now the state shed away its responsibility of policing many villages by granting them to brāhmaṇas, temples and monasteries. Moreover, it enormously increased its tributary vassals (*sāmantas*), who were obliged to supply their fixed quotas of fighting contingents at the time of war. All this led to the formation of a feudal polity, closely tied up with the decay of towns and trade. The decline of towns forced the brāhmaṇas to migrate to the countryside in search of new sources of livelihood. The land charters of the fourth to the seventh centuries, and even of later times, show that numerous donee brāhmaṇas moved from towns to villages. Along with them, artisans probably migrated to the rural areas, where they were attached to their patrons and paid in kind. Instead of operating independently artisans sought shelter and patronage from temples, monasteries and establishments of the landed magnates.

Temples, monasteries and walled structures of early medieval times were monumental buildings. Though such buildings symbolize the consumption of considerable surplus, overall they do not articulate artisanal and mercantile activities on any scale till the end of the tenth century. Glass goods, ivory objects, and beads of semiprecious stones found at early medieval sites are in much less quantity than those found in ancient urban centres. Coins and coin moulds are practically absent, and so are the seals depicted with coin devices. Early medieval settlements abound in bronze images and pieces of stone sculpture; both of these were used for religious purposes. Ancient Buddhist monasteries were generally located in the suburbs of the town, and owed their existence to the donations of artisans, merchants and other town dwellers including princes and officials. But early medieval religious establishments were maintained by grants of land and villages, out of which they granted plots of land to artisans and others for servicing and other purposes. Many temples in south India came to form the heart of non-agriculturist settlements, and in the long run they generated some crafts and mercantile activity, but not much is visible before the tenth century.

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The decline of ancient towns in early medieval times cannot be considered an indicator of decline in overall economic growth. What emerges now is a new type of economy marked by urban contraction and agrarian expansion. Taking the country as a whole, production seems to have picked up in both crafts and agriculture. But its volume was thinly spread over a large area and territory. Urban decline and stagnation resulted in agrarian expansion, which was promoted by land grants made by chiefs and princes. The emergence of numerous states in the early Middle Ages is a significant pointer to agrarian expansion. Nearly fifty states existed in the fifth to the seventh centuries, and many of them appeared in such areas as had never experienced any regular state machinery. Their land charters show that these states possessed all the essentials of organized political power. Every state evidently depended on a large agrarian base formed by villages bearing Sanskritic and non-Sanskritic names. Agrarian expansion was boosted by the migration of brāhmaṇas and craftsmen who disseminated advanced knowledge of agriculture and technology. Whether peasants also moved from populated areas to less cultivated areas is not known. But knowledge of agriculture came to be written down in texts belonging to the early Middle Ages. The availability of iron and its metallurgy became so common that this metal came to be used for non-utilitarian purposes such as for erecting Mehrauli and other victory pillars.

The *jajmānī* system was an important element in the social organization which arose in response to urban decline, lesser use of money and agrarian expansion. The regrouping and reorganization of social relationships affected by urban decline led not only to the rise of a class of landed intermediaries but also to the spatial and occupational immobility of the artisans by making them an integral part of the *jajmānī* system. Artisans and others were now firmly attached to the soil and their patrons. They were paid for their goods and services in kind when crops were gathered. What may have prevailed earlier on a limited scale became a common feature in the Middle Ages.

De-urbanization was therefore a feature of the first or the classical phase of feudalism marked by a subject peasantry and a dominant class of landlords in conditions of languishing trade and predominantly agrarian economy. It inaugurated an era of closed economy in which the needs of landed intermediaries were met locally without the effective intervention of traders whose functions were reduced to the minimum. The new situation established direct contact between the consumers on the one hand and the producers on the other. This was because of the rise of intermediaries in land between the state and the peasants. This snapped the direct connection of the peasants with the state which existed in pre-feudal times. State functionaries and its ideological supporters now tended to

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turn into landed magnates, who mainly lived on rent in kind or rent in labour collected from the peasants and artisans, they did not depend on taxes which were formerly collected by state officials and disbursed as gifts and salaries in towns. Therefore the shrinkage of the urban sector was closely connected with the conversion of the tax area into the rent area. Eventually religious and 'secular' non-agriculturist establishments were bound to turn into markets. As centres of consumption they had the potentiality to become centres of production and commodity exchange. In other words they could become towns and strengthen the mercantile and artisanal classes. But this was not to be for several centuries yet. Mild urban renewal began in parts of the country in the eleventh century, and by the fourteenth century urbanization became a recognizable process.

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Appendix 1*

TOWNS IN GUJARAT/MALWA/KARNATAKA FROM WHERE THE BRĀHMANAS MIGRATED TO ENJOY LAND GRANTS IN GUJARAT

S.no.	Date/AD	Original Home	Intermediate Home	No. of Migrant Brāhmaṇas	Object Granted	Reference
1	*2*	*3*	*4*	*5*	*6*	*7*
1.	605	Saṃgapurī (Shahpura near Junagadh)	–	44	Village	*EI*, XI, 174 ff.
2.	606	Ānarttapura (Vaḍanagara in Mehśana district)	Valabhī	1	A field and a *vāpī*	*ARWH*, RAJKOT, 1922-23, 10; *JBBRAS*, NS, I, 29 ff.
3.	609	Daśapura (Mandasor in Malwa)	Valabhī	2 (Brothers)	Village	*JUB*, III, pt. I, 74 ff; *BP*, LXXXII, 411-13; *HIG*, pt. I, 134.
4.	616	Kāśahṛda (Kāsandrā, 25 miles south of Ahmedabad)	Trāmadi (?) (Trāvada near Amreli or Taredi, Near Mahuva)	1	Two *vāpīs*	*IIBS*, 1943, I, 7 ff.
5.	623	—	Hastavapra (Hāthab in Bhavnagar)	1	Three fields and a *vāpī* (in three different villages of Saurashtra)	*EI*, XXI, 181 ff.
6.	624	—	Ānandapura (village)	1	Village	*BP*, CIII, 131 ff; *JUB*, XIX, NS, 1 ff.
7.	628-29	1. Jambūsara (Jambūsara in Broach) 2. Bharukaccha	1. Śirīṣapadraka in the Akrūreśvara viṣaya (Sisodra in Akleśvara) 2. Bherajjikā (Borjai, 12 miles east of Akleśvara in Broach)	40	Village	*IA*, XIII, 81 ff; *CII*, IV, pt. I, 57 ff.
8.	631-32	Girinagara (Girnar in Junagadh)	Kheṭaka (Kaira)	1	Field	*JBBRAS*, NS, I, 70.

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9.	634 (cf. 628-29)	—	Jambūsaras		34	Village	*IA*, XIII, 88 ff; *CII*, IV, pt I, 67 ff.
10.	634	—	Ānarttapura		1	Village	*BP*, CXXIX, 6-7; *JOI*, XXXI, 84 ff.
11.	641-42	Daśapura (Mandasor in Malwa)	Kṣīrasara-grāma (Kharlākuā, near Kukad in Saṅkheda situated in Baroda	1 1	The same Brāhmaṇa	Field	*EI*, V, pp 39 ff; *CII*, IV, pt I, 75 ff.
12.	641-42	—	–do–		1	Field	*EI*, V, 39 ff; *CII*, IV, pt I, 78 ff.
13.	642	Ānarttapura	Valabhī		1	Field	*JOI*, X, 123 ff; *EI*, XXXV, 281 ff; *BP*, CVII, 231 ff.
14.	645	Siṃhapura (Sihor near Bhavnagar)	Kikkatāputra-grāma		Two brothers	Four fields and a *vāpī*	*PRAS, WC*, 1919-20, 54; *JBBRAS*, X, 66 ff.
15.	648	—	Dhārapura		1	Field and a *śibira* (farm house)	*Svādhyāya*, XIV, 172 ff.
16.	649	Udumbaragahvara	Kheṭaka		1	Two fields and a *bhṛṣṭi* (deserted orchard)	*IA*, XV, 335 ff.
17.	649	Ānarttapura	Kāsaragrāma (Kāsara, 5 miles north west from Petlad)		1	Village	*IA*, VII, 73 ff.
18.	654-55 (656)	—	Vijaya-Aniruddhapurī		1	Village	*IA*, XVIII, 265 ff.
19.	656	Ānandapura	Kheṭaka		1	Village	*IA*, VII, 76 ff.
20.	661	Gomūtrikā	Śrī-Valabhī		1	Village	*IA*, V, 207, ff.
21.	666	*i)* Kuśahṛda (Kāsandra, 25 miles south of Ahmedabad)	*i)* (?)		3 (out of these two were family members.—	Two fields and a *vāpī*.	*JBBRAS*, NS I, 73 ff.

* This appendix is based on the material collected by Dr. Snehlata Anand.

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1	2	3	4	5	6	7
		ii) Girinagara *iii*) Girinagara	*ii*) Siṃhapura *iii*) Siṃhapura	father and a son)		
22.	666	Ānandapura	Śrī-Valabhī	1	Two fields and two *vāpīs*	*JBBRAS*. NS, I, 71-72.
23.	666	Puṣyaśāmbapura	Śrī-Valabhī	1	One field consisting of three pieces and a *vāpī*.	*PRAS, WC*, 1915-16, 55; *EI*, XXI, 208 ff.
24.	668	Girinagara	—	Two related brāhmaṇas	Village	*EI*, XXXIV, 117 ff.
25.	669	Dvīpa (Diu)	—	Two brothers	A field divided into three pieces and a *vāpī*.	*EI*, IV, 74 ff.
26.	671	Ānandapura (identical with Vaḍanagara)	Valabhī	1	A field consisting of two pieces.	*IA*, XI, 305 ff.
27.	675-76 (cf. no. 29)	Puṣyaśāmbapura	Possibly Śrī Valabhī	1	A *vāpī* and a field split into five pieces	*EI*, XXII, 114 ff.
28.	676	Girinagara	Śraddhikā (Ṣādhi, to the east of Aṁti in Pādrā taluka of Baroda district)	1	A field divided into two pieces and a *bhṛṣṭi* (deserted orchard)	*ARAD, Baroda State*, 1938-39, 16, *IIBS*, I, 16 ff.
29.	684	Girinirjhara	Kheṭaka	1	A field (5 pieces) and a *vāpī*	*JASB*, VII, 966 ff; *HIG*, pt I, no. 85.
30.	685	—	Ānandapura (Vaḍanagara)	Two brothers	Field (two pieces)	*BP*, CXXIV, 203-04; *Svādhyāya*, XV, 202 ff.
31.	687	Ānandapura	—	14	Field (two pieces), and a *vāpī*	*EI*, XXXV, 281.
32.	694 (cf. no. 38)	Ānandapura	—	1	A field and a *vāpī*	*BP, CV*, 9-11.

33.	694	Viñchu-Daśapura	Vaṃśakaṭa (Visalia near Mahuva or Vasavad in the Verawal taluka of Junagadh district)	1	Village	*Collection of Prakrit and Sanskrit Inscriptions* I, 54 ff.
34.	703	—	Ānandapura	1	Village	*JOI*, XVII, 59 ff and 181 ff.
35.	704	Girinagara	Śraddhikā-*agrahāra*	1	field (64 *nivartanas* of land)	*IA*, XIII, 75 ff; *CII*, IV, pt. I, 82 ff.
36.	705	—	Maṭasara-adhiṣṭhāna	Assemblies of the *traividyas* and *cāturvidyas*	*i*) Field (2 plots) *ii*) Field (3 pieces)	*BP*, CIII, 9 ff; 73 ff; 102 ff.
37.	706 (cf. nos. 29 & 34)	Puṣyaśāmbapura	Possibly Śrī-Valabhī	1	Field and a *vāpī*	*PRAS, WC*, 1915-16, 55.
38.	706	Paṅadārsī	Saujkhera (Possibly Sāmbeja, six km north of Kaira)	1	Field	*BP*, CXXV, 442-43.
39.	710	—	Brahmapurī (Probably Bāmanphaliā, nine miles south-west of Nandod)	1	Three pieces of land (*bhūkhaṇḍa*)	*EI*, XXV, 292 ff; *CII*, IV, pt. 1, 90 ff.
40.	722	—	Śrīmad-Ānandapura	1	Two villages	*JOI*, XVII, 59 ff, 186 ff.
41.	739	Vanavāsī (Vanavāsī in north Kanara)	—	1 Two brothers	Village Same Village Village	*CII*, IV, pt I, 137 ff.
42.	739	Vanavāsī	—	1		*HIG*, pt. I, 15.
43.	739	Ānandapura	—	2 (brothers)	Village	*BP*, CXXV, 445; *Svādhyāya*, XVI, 440 ff.
44.	744	*i*) —	*i*) Ānandapura			
		ii) —	*ii*) Ānandapura	2	Village	*BP*, CXXVI, 41.
45.	757	—	Jambūsara	1	Village	*JBBRAS*, XVI, 105 ff.
46.	642-43 (Spurious plates)	Jambūsara (*Jambūsara-sāmānya Vājasaneya-Kaṇva adhvaryū* (Jambūsara in Broach)	—	63	Village	*IA*, VII, 241 ff; *CII*, IV, pt I, 165 ff.

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1	2	3	4	5	6	7
47.	c. 7th Century (Śaka 400)	Kānyakubja (Kanauj)	—	1	Village	*IA*, VII, 61 ff.
48.	c. 7th Century (Śaka 415)	—	Kānyakubja	1	Village	*IA*, XVII, 183 ff.
49.	c. 7th Century (Śaka 417)	—	Ahicchatrā	1	Village	*IA*, XIII, 115 ff.

NOTES: *i*) Most of the places mentioned as original or intermediate homes of the brāhmaṇas were towns, as would appear from their identification or the suffix *pura* attached to them. Some other places such as Jambūsara or Lohigakakṣa-pathaka are considered towns on the ground that the term *grāma* is not attached to them.

ii) In the context of original home the term *vinirgata* or 'coming from' is used; in that of intermediate home the term *vāstavya* or 'resident of' is used although this term might indicate original home.

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Appendix 2

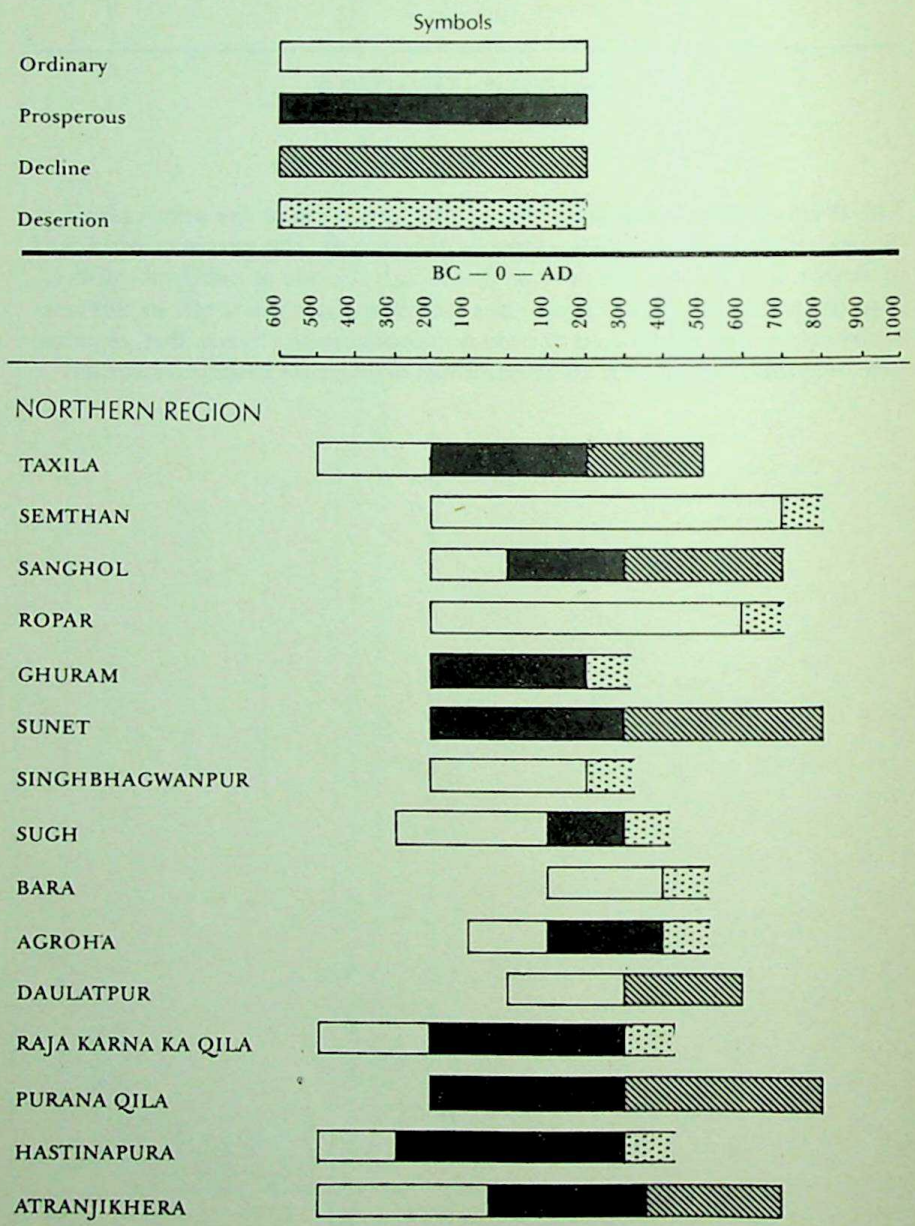
Note on Diagram

The diagram shows not only the decline/desertion of the urban phase at excavated sites but also its beginning and growth. The varying fortunes of urbanism at 130 sites are indicated through the use of different symbols. The diagram includes certain sites which are not discussed in the text. Some other sites illustrated in it do not appear in the maps. But, as in the case of symbols used in it an attempt has been made to attain accuracy.

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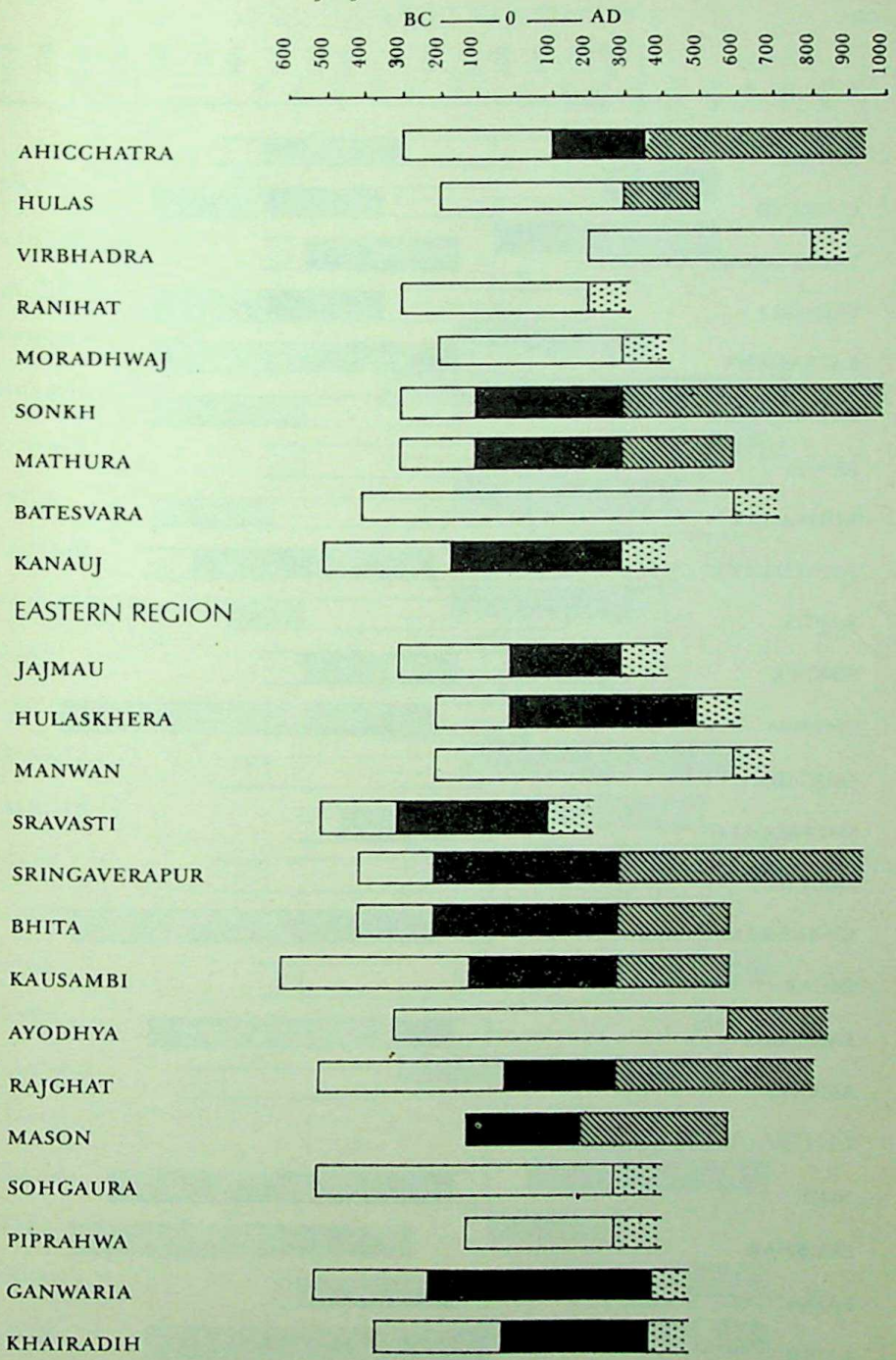
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Life of Urban Phase at Excavated Sites



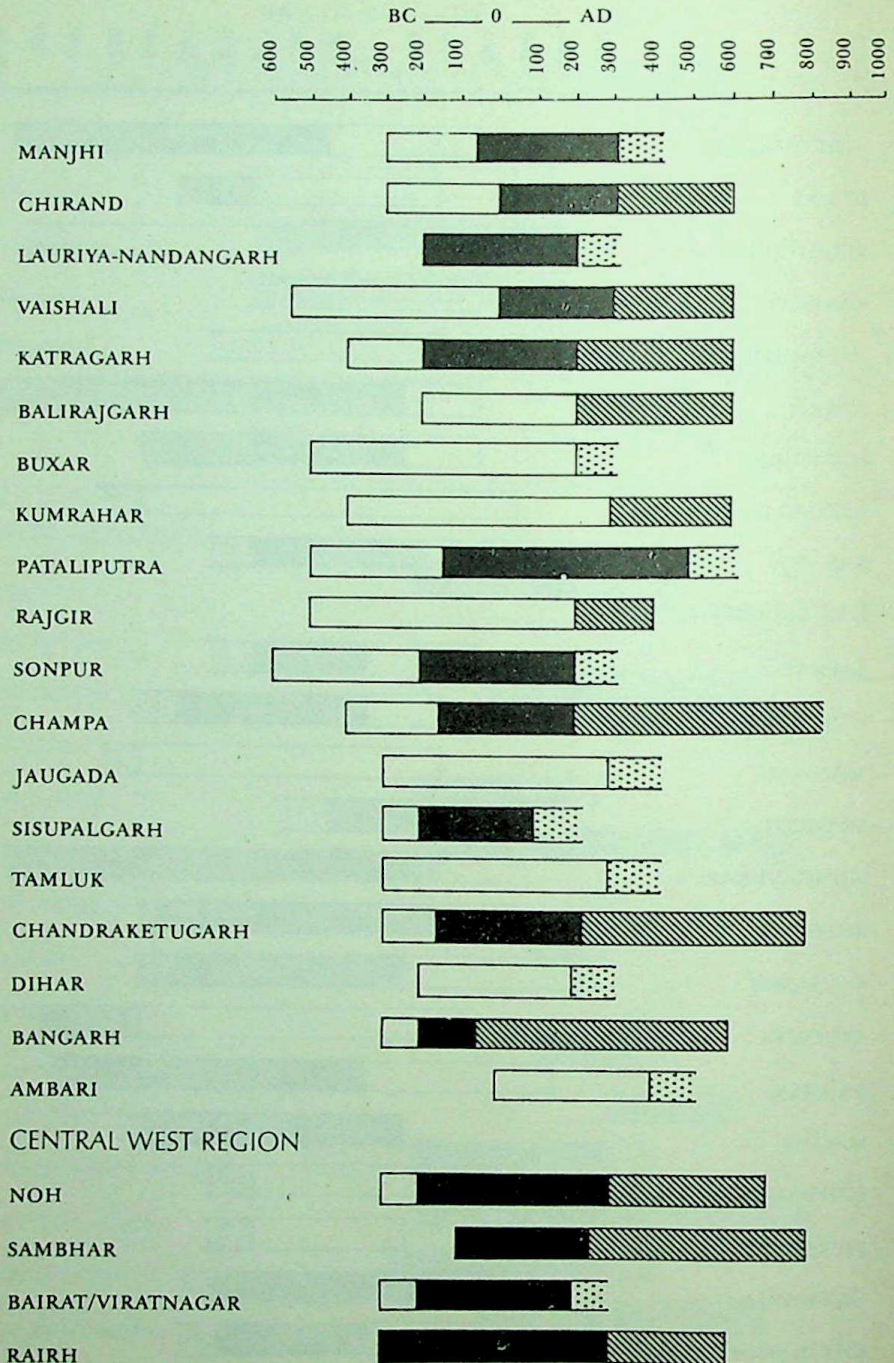
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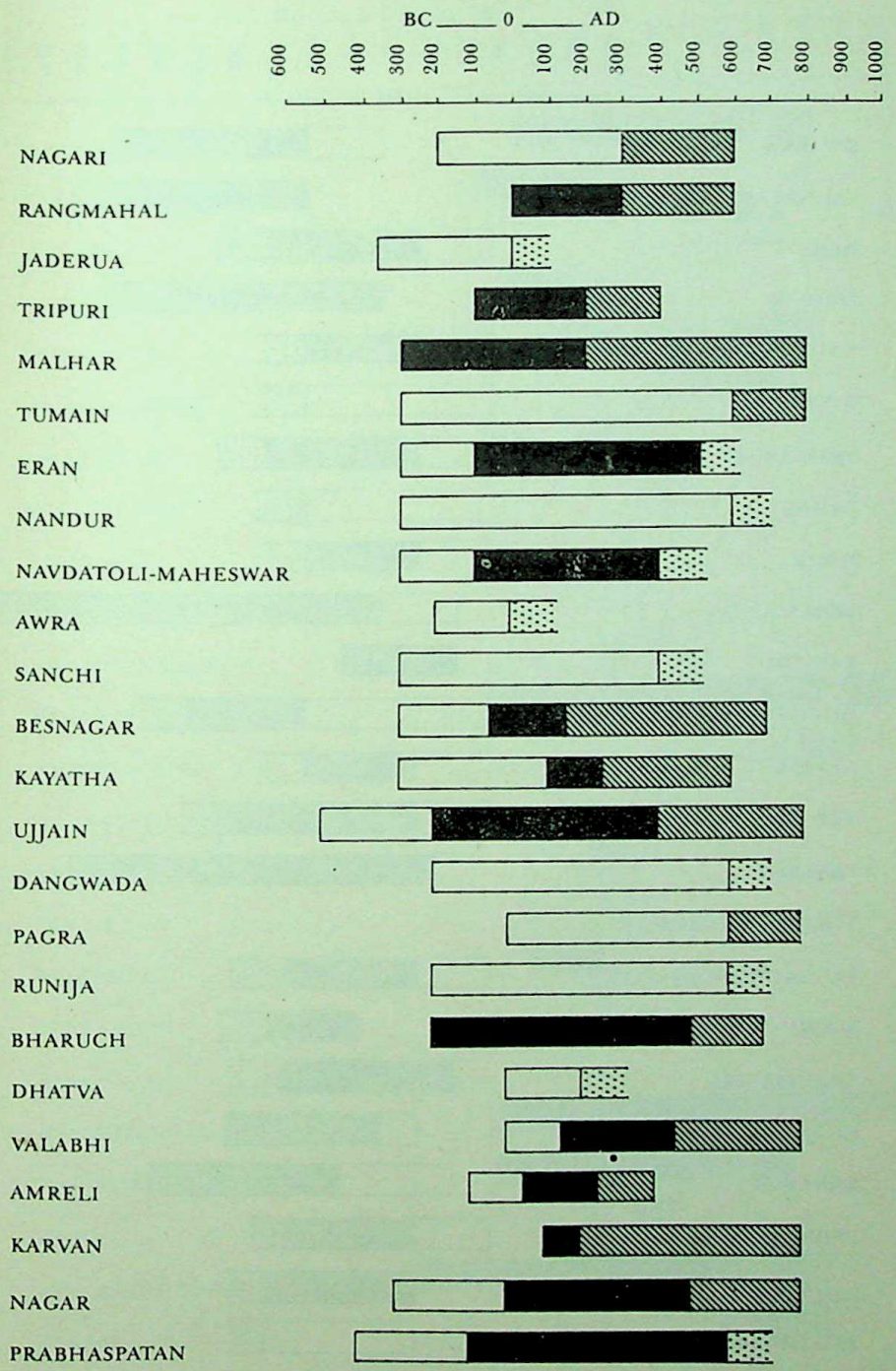
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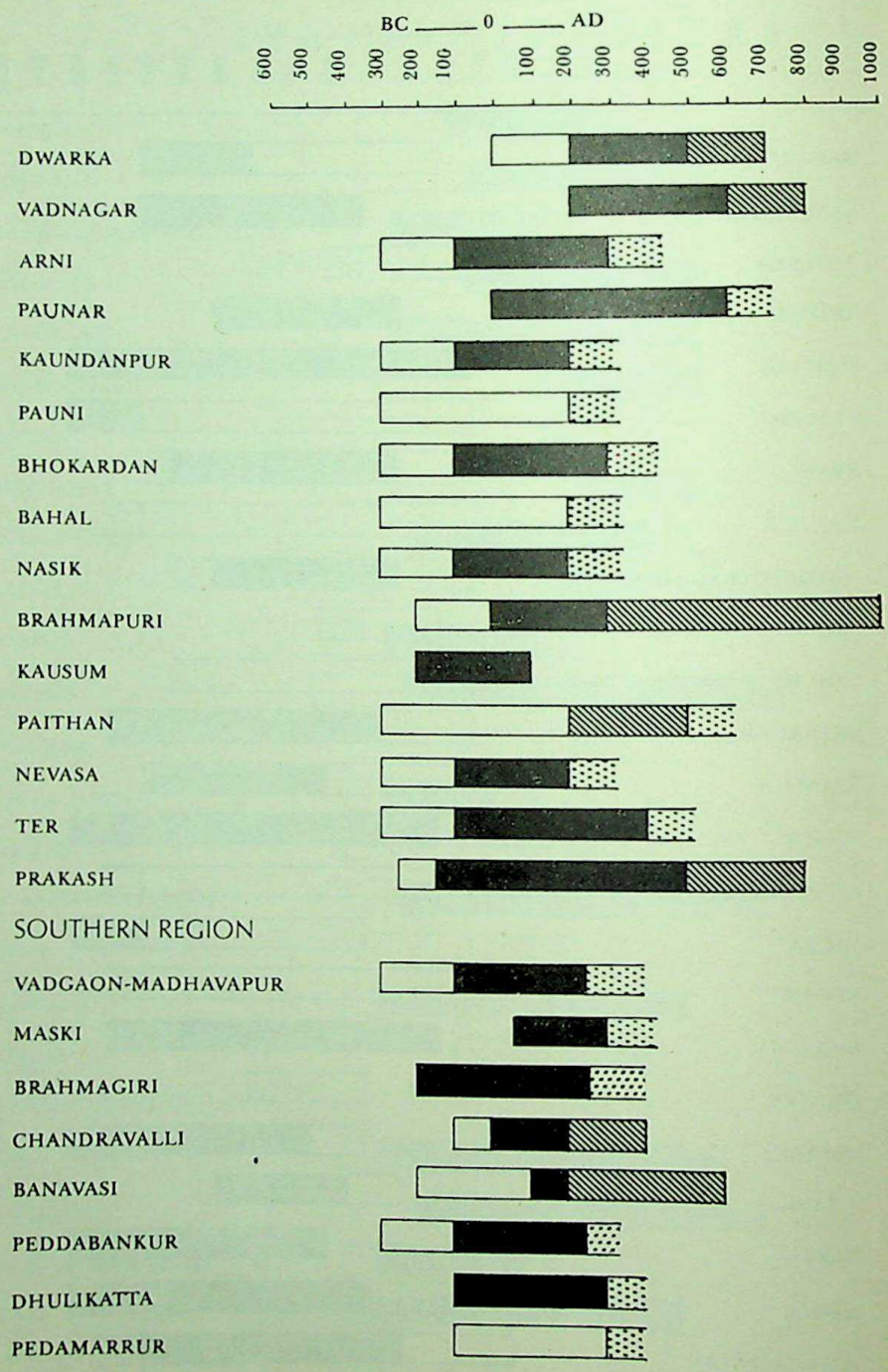
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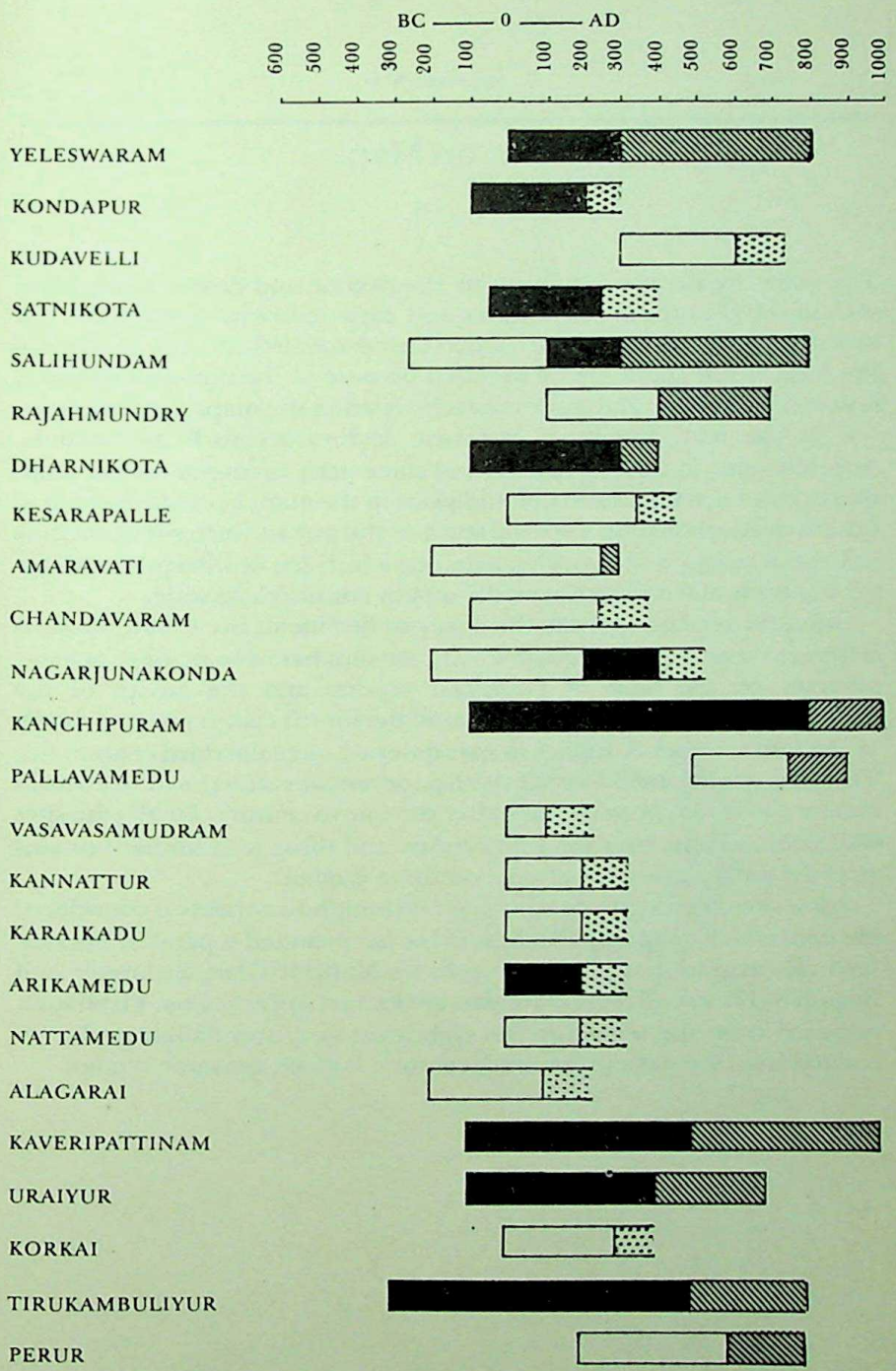
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Appendix 3

Note on Maps

The maps are designed to illustrate the decline and desertion of urban sites in the country in late ancient and early medieval times. With the exception of Sannathi (in Karnataka) only excavated sites are plotted on the map. A few could not be included because of the non-availability of reports about them, and some others inserted in the maps are not discussed in the text. Excavated monastic settlements such as Nalanda, Antichak, etc., in eastern regions and some early medieval temple complexes in southern parts do not find place in the maps because they fail to exhibit clear urban traits until the tenth century or so. Such sites generally lack metal money and also other artefacts which can be interpreted as signifying trade and artisanal activities on any considerable scale.

Different symbols indicate the decay or decline of the urban phase at different times. In devising symbols an attempt has been made to achieve accuracy on the basis of published reports and the advice of the excavators. Urban sites deserted around the fourth century AD are shown by the same symbol as applies to sites deserted after the third century AD. The same symbol is used for sites with poor remains after the third century and for those with poor remains after the fourth century. Finally the sites with poor remains after the fifth century and those with similar remains after the sixth century are given a common symbol.

A few sites deserve special mention. Although Kumrahar is considered identical with Pāṭaliputra, Pāṭaliputra has been plotted separately because separate excavation report on it includes Mahabir Ghat, Sadargaly and Begum Ki Haveli; all these three sites are located in Patna City. Virbhadra, occupied from the second to the eighth century, and Pallavamedu, inhabited from the sixth to the ninth century, is given the same symbol.

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STATE OF URBAN SITES IN THE INDO-GANGETIC PLAINS & ADJOINING AREAS

Contd. occupation from the 6th/2nd cen.B.C. to the 2nd/3rd cen. A.D. followed by desertion

Contd. occupation from the 6th/2nd cen.B.C. to the 3rd cen.A.D followed by poor remains

Contd. occupation from the 6th/2nd cen.B.C. to the 6th/8th cen. A.D. followed by desertion

Contd. occupation from the 6th/2nd cen.B.C. to the 6th/8th cen.A.D. followed by poor remains

Contd. occupation from the 6th/2nd cen.B.C. to the 10th cen.A.D. or beyond

Contd. occupation from 1st. cen. B.C. / 1st cen A.D. to 2nd cen. A.D. followed by desertion

Modern towns

0 100 200 300 400 500 Kilometres

64° 68° 72° 76° 80° 84° 88° 92° 96°

36° 32° 28° 24° 20°

SRINAGAR
Toxila
ISLAMABAD
Semthan
Bara
Roper
Sunet
Singh Bhagwanpur
Sanghol
CHANDIGARH
Ranghat
Ghuram
Sugh
Virbhadra
Raja-Karan-Ka Qila
Daulatpur
Hulas
Moradhwaj
Rangmahal
Agroha
Hastinapura
DELHI
Purana Qila
Ahichchhatrā
Mathura
Atranjikhera
Manwan
Sravasti
Ganwaria
KATHMANDU
Kusinagara
Lauriya-Nandangarh
Piprahwa
Sonkh
Bairat
JAIPUR
Noh
Batesvara
Kanauj
Hulas-Khera
Ayodhya
Sohgaura
Balirajgarh
GANGTOK
THIMPHU
ITANAGAR
GAUHATI
Ambari
KOHIMA
Sambhar
LUCKNOW
Chirand
Katragarh
Rairh
Jaderua
Jajmau
Manjhi
Chandahadih
Sringaverapur
Khairadin
Vaishali
Chechar-Kutubpur
SHILONG
Bangarh
Masaon
PATNA
Kumrahar
Kausāmbi
Rajghat
Buxar
Rajgir
Pātaliputra
Champa
IMPHAL
Bhita
Sonepur
Nagar
Awra
Tumain
Eran
DACCA
AGARTALA
AIZWAL
Sondhi
Vadnagar
Besnaga
Sanchi
Tripuri
Dihar
Chandraketugarh
ARABIAN SEA
GANDHINAGAR
Ujjain
BHOPAL
Runija
Nandur
Dangwada
Kayatha
Pagara
Maheswar
CALCUTTA
Tamluk
Nagara
Dwarka
Baroda
Karvan
Valabhi
Malhar
BAY OF BENGAL
Amreli
Bharuch
Prakash
Kaundanpur
Dhatvol
Paunar
Pauni
Prabhas Patan
Bahal

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STATE OF URBAN SITES IN THE INDIAN PENINSULA

Contd. occupation from the 6th/2nd cen. B.C. to the 2nd./3rd cen. A.D. followed by desertion

Contd. occupation from the 6th/2nd cen. B.C. to the 3rd cen. A.D. followed by poor remains

Contd. occupation from the 6th/2nd cen. B.C. to the 6th/8th cen. A.D. followed by desertion

Contd. occupation from the 6th/2nd cen. B.C. to the 6th/8th cen. A.D. followed by poor remains

Contd. occupation from the 6th/2nd cen. B.C. to the 10th cen. A.D. or beyond

Contd. occupation from 1st cen. B.C./1st cen. A.D. to 2nd cen. A.D. followed by desertion

Modern towns

0 100 200 300 400 500 Kilometres

ARABIAN SEA

BAY OF BENGAL

Vadnagar, Sondhi, Awra, Tumain, Eran, Besnagar, Sanchi, Ujjain, BHOPAL, Tripuri, Dangwada, Runija, Nandur, Pagara, Kayatha, GANDHINAGAR, Dwarka, Nagara, Baroda, Karvan, Valabhi, Maheshwar, Malhar, Amreli, Bharuch, Prakash, Kaundanpur, Dhatva, Prabhas Patan, Pauni, Paunar, Arni, Bahal, Bhokardan, Nasik, Kausam, Paithan, Brahmapuri, Nevasal, BOMBAY, Dhulikatta, Peddabankur, Ter, Kondapur, HYDERABAD, Sannathi, Peddamarrur, Nagarjunikonda, Yeleswaram, Vadgaon-Madhavapur, Kudavelli, Satnikota, Maski, PANJIM, Brahmagiri, Banavasi, Chandravalli, BANGALORE, MADRAS, Kanchipuram, Pallavamedu, Vasavasamdram, Kunnattur, Arikamedu, Adiyamankottai, Karaikadu, Hemmige, Nattamedu, Tirukkambuliyur, Perur, Uraiyur, Kaveripattinam, Korakai, TRIVANDRUM, Rajahmundry, DharniKota, Amaravati, Kesarpalli, Chandavaram, Salihundam, Jaugada, BHUBANESWAR, Sisupalgarh, Dihar, Chandraketugarh, Tamluk, CALCUTTA, DACCA, AGARTALA, AIZWAL

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Index

PĀLI, PRĀKRIT, SANSKRIT AND ALLIED WORDS

ācārya 163
adhikaraṇa 37, 108
adhiṣṭhāna 37, 108
adhiṣṭhānādhikaraṇa 108
agrahāra 140-41
āgrīvāṇijā 146
ālārikā 144
apakṛṣṭa 169
āpaṇa 147
aprahata 169
araghaṭṭa 173
ārahaṭṭiya-nara 174
aṣṭādaśāṭavī 168-69
aṣṭādaśakarāḥ 151
astragrāhin 118
aṭṭavāṇijā 146
avalagana 153
avanirandhra 169
avi 145
ayakārā 145
āyatana 147

bajri 81
bali 163
bhata 168
bhaṭakā 146
bhaṭṭāgrahāra 140
bhaṭṭiputtā 144
bheri-śaṅkha-mṛdaṅga-pāṭahikā 144
bhukti 22
bhūmicchidranyāya 169-70

caitra 112
caityas 91
cakravartin 118
calakā 144
carmakāra 158-59, 165, 167
caru 163
caṭa 168
cāṭa 168
celakā 144
cetayikā 144
chaubachchās 91

dadhyikā 146
dānapati 164
daṇḍa 168
daṇḍaḥ 150
daṇḍaka 156
dantakāraka 144
daśahalī 176
dāsa-karmakara 158
dāsikaputtā 144
devatādhyakṣa 149
dhannuggahā 144
dhanukarathikahastyārohas 143
dhenkī 123
dīkṣita 156
dīnāras 109, 117, 124
droṇaka 118
durga 118, 149, 151
durganiveśa 7, 152
durgavidhāna 7
dussikā 145
dvistalabhāṇakā 144

ekādasāyella-vādyakā 144

gahapatis 175
gaṇakas 159
gāndhī 146
gandhika 146
gaṇikā 144
gāyanakā 144
ghaṭakuṇḍikā 146
ghaṭi-yantra 174
golikā 146
goṣṭhis 100
gotra 153
grāma 140
grāmācāra 177
grāmadharma 177
grāmalakṣaṇa 117, 156, 171

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Digitized by Sarayu Foundation Trust, Delhi and eGangotri

grāmaśilpin 166
grāmavinyāsa 171
grāmavṛddhas 175
gṛhapati 175
guḍapācaka 146
guṇavartā 144

hāsyakāraka 144
hāṭs 177
heraññika 148
hīnasippāni 153
hiranyaka 148

indajālikā 144

jajmānī 157, 159, 166, 177, 184
janapada 152
jātis 154

kahāpaṇa 148
kālapātrikāḥ 145
kamalavana-vaṇik-sthāna 142
kandukā 146
karmmakara 158
kārpāsika 145
kārṣāpaṇa 117
kārus 160
kaserās 154
kāṣṭhavāhaka 145
kāṣṭhavāṇijā 146
kaṭṭhahāraka 146
kauśāvika 145
kauśeyāvika 145
khaṇḍakāraka 146
kharvaṭa 118, 156
kheṭa 118, 156
kheṭaka 156
khila 169
kolaka 118
kośāvika 145
kośa 168
kṛṣīvala 172
kṣudraprakṛti-kuṭumbin 176
kubjaka 118
kulika 46
kulyavāpa 109
kumārāmātyapārisadyāḥ 143
kumbhadāsī 144
kumbhāṇḍa 12
kumbhatūṇika 144
kūpakhanakā 145

kuṭumbin 175
kuṭumbinī 175

laṅghakā 144
lasikā 144
lohakārā 145

macohikā 146
madhukārakā 146
mahācaitya 96, 98
mahādaṇḍanāyaka 64
mahānāgā 144
mahārāja 118
mahattama 175
mahattara 159, 175
mahāvihāra 125, 162-64
mahīpati 153
mahuā 155
majjikā 146
mallā 144
mallagaṇā 144
maṃsikā 146
maṇḍana 88, 95
maṇikārakā 144
maṇḍaleśa 118
maṭhas 117, 158-59
modakakāraka 146
mṛttikāvāhaka 145
mūlavāṇijā 146
mūlikā 146
mung 81

naccakā 144
nagara 5, 118, 140, 151, 155-56
nāgaraka 115
nagaralakṣaṇa 117
nagaraśreṣthin 108
nagaravidhāna 117, 156
nagaravinyāsalakṣaṇa 117
nagarī 118
nāgarika 149
naivedya 163
nakara 151
nandyāvarta 156-57
nāpitā 145
narendra 118
naṭakā 144
navakarma 159
nāvikā-olumpikā 145
nigama 5, 46, 100, 118, 125, 146, 152 155

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Digitized by Sarayu Foundation Trust, Delhi and eGangotri

odanikā 146

pakhaṇḍino 144
pañravatukā 144
paṇṇikā 146
pārṣṇika 118
pāṭakas 158-59, 170
paṭṭabhāj 118
paṭṭadhara 118
pattana 118, 140, 156
pelalakāḥ 145
phalavāṇijā 146
phalikā 146
piṇḍadāvikā 144
prahāraka 118
prakṛtis 154
prastara 156
prastārikā 144
prathamakulika 108
pravārikā 144
pratilomas 156
pṛthuloma 156
pura 118, 140, 155, 156
purapradānasaṃbhedaḥ 140
pustakārakāḥ 145
pustakakarmakārakā 145

rājadhānī 118
rājaputtā 144
rājaśāna 176
raṅgakāra 145
rāṣṭra 149
ratna-traya 162
rlla-malla-paṇisvarikā 144
rūpakāra 148

sajjhakāra 145
śālidhānya 174
sāmantas 156, 183
samitakārakā 146
saṃviddha 118
saṅghārāmas 13, 33, 39, 51, 57, 71, 101, 141, 161
sārthavāha 46, 108, 113, 146
śaṅkhika 144
śarkaravāṇijā 146
sarvapīḍā 131
sasyajātakam 114
śatahalī 176
sattu 146
śauṇḍika 112
śibira 118
sīdhukārakāḥ 145
śilpin 160
śimbīśukadhānyagaṇa 174
sīsākārā 145, 148
skandhāvāra 118, 152
sobhikā 144
śreṇi 147, 153-54
śreṇi-pura-kośānām 111
śreṣṭhi 99, 143, 146
śreṣṭhin 46, 161
śreṣṭhin-kulika-nigama 108
śreṣṭhipramukha-nigama 99
śreṣṭhi-sārthavāha-kulika-nigama 108, 125
śrīpaṭṭa 153
stambavāṇijā 146
sthānīya 118
sthapati 160
sthapatisūtradhāraka 145
śūdrasaṃgha 156
sūrā 144
sunthikāḥ 145
suvaṇṇa 116
suvaṇṇakāra 145
svāmipas 156
svastika 156

tailika 146
takṣa 166
tāṇḍavikā 144
tantravāyakā 145
tantrīs 165, 167
tharuggahā 144
tiṇahārakā 146
tipukārā 145
tīrthas 117
tṛṇaśālidhānya 174
tṛṇavāṇijā 146
tūṇa-paṇava-vāṇā-vallakī 144
tunnavāya 145

vāpī 173, Appendix 1
varddhaka 118
uggā 144
upādhyāyas 159
uptakoṣṭhakārakā 145
ūrṇa-vāyakā 145

vāhinīmukha 118
vaiśyasaṃgha 156
vammino 144

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vaṃsavāṇijā 146
vaṇijgrāmo 146
vāṇijā 146
vāṇik 113, 178
varṇa 165, 170, 182
varūtha-tantravāyakā 145, 150
vaṭṭakārā 145
velambakā 144
vettikas 158-59
vihāras 162-64
viṣaya 64, 108-9, Appendix I
viṣṭi 131

yodhino 144

AUTHORITIES

Abrams, Philip 3, 136, 149
Acharya, P.K. 118, 156-57
Adams, Robert McC 4, 148
Agrawala, V.S. 115, 134
Agni Purāṇa 173
Ahmad, Qeyamuddin 119
Akhtar, Naseem 123
Al-biruni 119, 120, 154
Altekar A.S. 51
Amara 174
Amarakośa 174
Ansari, Z.D. 67, 74
Aparājitapṛcchā 171
Arthaśāstra, of Kautilya 166
on fortifications 7; on agriculture 170-71, 180; on state income from towns 149-50, 180; on taxes 175; on town dwellers 152-53, 180
Ashrafyan, K.A. 120
Auboyer, Jeannine 8, 127
Ayodhyākāṇḍa 114

Bagchi, P.C. 130
Basham, A.L. 139, 143, 144-47
Beal, Samuel 47, 163
Bhat, M. Ramakrishna 109-12, 114
Bhattacharya, S. 4
Bhattasali, N.K. 158, 170
Bhavasvāmī 140
Bhavisayattakahā 115
Bloch, T. 44, 46-47, 132
Bose, D.M. 173
Bṛhat Kalpa Sūtra Niryukti 151
Bṛhatkathā 116
Bṛhatkathā Koṣa 116
Bṛhatkathāśloka Saṃgraha 116
Bṛhat Saṃhitā 139
on agriculture 170-71, 173; on decline of towns, trade, traders, crafts and craftsmen 109-14, 180; *see also*, Varāhamihira

Chakravarti, P.C. 169
Chattopadhyaya, B.D. 4, 115-16
Chattopadehyaya, Debiprasad 126
Chaudhary, S.K. 123, 162
Chaudhury, K.G. 158-59, 170
Chepekar, B.N. 82
Childe, V.G. 4, 6
Chowdhary, S.N. 71, 132-33
Chowdhury, T. 174
Cipolla, Carl M. 125
Cunningham, Alexander 1

Dagnes, Bruno 171
Dalal, C.D. 115
Dani, A.H. 135
Das, S.R. 162
Dasgupta, T.C. 174
De Goeje 119
Deo, S.B. 65, 75-80, 132
Desai, Devengana 126
Deyell, J.S. 124
Dhavalikar, M.K. 67, 75
Dikshit, M.G. 63, 76, 79, 80, 127, 133
Dudhapani Rock Inscription of Udayamāna 153
Dowson, John 151
Dutt, Breham 5

Ehrhardt, Sophia 80
Elliot, H.M. 151

Fa-hsien, on decline of towns and monasteries 8, 162-63; *see also*, Bodh Gaya, Champa, Ghoṣitārāma monastery, Kapilavastu, Kuśīnagara, Mathura, Pāṭaliputra, Sarnath.

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Śrāvastī, Tāmraliptī
Fariq, K.A. 119
Ferrand 119

The Garland of Madurai, *see* *Maduraikāñjī*
Gaur, R.C. 10, 21-23
Geniza records 137
Ghosh, A. 2, 4, 22, 54, 102, 103, 128
Ghosh, N.C. 93, 94, 137
Ghoshal, U.N. 115
Golf, Jacques Le 125
Goswami, K.G. 58
Grāmapaddhati 171
Grāmavāsasāra 171
Grāmavicāra 171
Guṇāḍhya 116
Gune, P.D. 115
Gupta, Chitralekha 116
Gupta, P.L. 22
Gupte, R.S. 76-78, 132

Habib, Irfan 177
Habib, Mohammad 165
Habibullah, A.B.M. 170
Haribhadra Suri 115-16
Hariṣeṇa 116
Härtel, Herbert 25
Hodges, Richard 137
Hopkins, Keith 3, 136, 149
Hsüan Tsang 140; on decline of towns and monasteries 8, 118-19, 162-63, 181-82; on donation of towns and shops 140; on land grants 140, 163; on the army of Harṣa 151, 172; on components of cities 118-19; *see also*, Bharukaccha, Champa, Dhānyakaṭaka, Gaya, Kāñcīpura, Kapilavastu, Karnataka; Kauśāmbī, Kuśīnagara, Mathura, Pāṭaliputra, Rāmagrāma, Śrāvastī, Srughna, Taxila, Ujjayinī, Vaishali, Varanasi

Ibn al Fakih Hamdani 119
Ismail, K. 137
I-tsing 163

Jain, Jagdishchandra 115-17, 151
Jain, K.C. 133
Jain, Prem Suman 116
Jain, V.K. 173
Jātakas 141, 149, 153
Jha, Nathan 157-58
Jinavijayaji, Muni 115
Jolly, J. 115, 140
Joshi, J.P. 76-77

Kaiyaṭa 5
Kalhaṇa 116
Kālidāsa 110
Kāmasūtra 115, 178
Kamban 172
Kangle, R.P. 149-50
Karashima, Noburu 164
Kāśyapa 172-74
Kāśyapīyakṛṣisūkti 172, 174
Kautilya 7, 143, 148-50, 152-53, 160, 166, 170-71, 175, 180f; *see also*, *Arthaśāstra*
Khan, Mohammad Abdul Waheed 89
Kielhorn, F. 153
Korotskaya, A. 137
Kosambi, D.D. 169
Krishna Deva 2, 35, 44, 46, 102, 103
Kṛṣiparāśara 172-73
Kṣemakirti 151
Kṣemendra 116
Kuṭṭanīmatam 115
Kuvalayamālā 115-16

Lahiri, Bela 124-25
Lal, B.B. 10, 21, 56
Legge, J. 26, 29
Lokaprakāśa 116
Lombard, Maurice 125

Mādhavakara 174
Maduraikāñji 143, 145, 147
Mahalingam, T.V. 104-5
Mahāvastu, on brāhmaṇas as town dwellers 160; on artisans and merchants 145-47, 150-51; on craftsmen in cities 144-45; on occupations of townspeople 143-44, 178
Maity, S.K. 112-14, 137, 176
Majumdar, N.G. 50
Majumdar, R.C. 119, 168-69
Malalasekera, G.P. 41, 161
Malayagiri 151
Mānasāra 117-18, 155-57, 171
Manu 139-40, 145
Margabandhu, C. 126, 128, 132
Marshall, John 1, 11-13, 32, 161

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Digitized by Sarayu Foundation Trust, Delhi and eGangotri

Masson, V. 135
Mate, M.S. 74
Mathur, V.K. 22, 110
Mayamata 5, 117, 171
Mazumdar, B.P. 140, 142, 170, 173
Mehta, R.N. 71, 73, 132-33
Milinda-Pañho, on artisans and merchants 145-48, 150; on craftsmen in cities 144-45, 150-51; on ideal town 148; on occupations of towns people 143-44, 152-53, 178; on brāhmanas as town dwellers 160; urbanization in 150
Misra, B.N. 98-99
Misra, Vijaykanta 44, 46, 51
Mitra, Debala 122-23, 125, 128, 162-64
Mitramiśra 140
Monier-Williams 5, 148
Mrcchakatika 108
Mukherjee, R.R. 176
Mukherjee, S.N. 139
Mukhtasar Kitabul Buldan 119

Nadir, Muinuddin Ahmad 119
Nainar, S.P. 95, 97
Nandi, R.N. 4, 152, 160, 177
Nārada 140
Nāradīya Dharmaśāstra 140
Nāradīyamanu Saṃhitā 140
Narain, A.K. 35-38, 125
Narain, Lala Aditya 51-52
Narayan, N. Sankara 130
Narayana, Basudev 45, 55
Niśītha Cūrṇi 115

Oldenberg, Hermann 161

Pandeya, B.K. 158, 164
Pāṇinī 166, 173
Pankhurst, Richard 137
Parāśara Smṛti 171
Paryāyamuktāvalī 174
Paryāyaratnamālā 174
Paschimbhāg Copper-plate of Mahārāja Śrīchandradeva 158, 170
Patil, D.R. 115
pattupaṭṭu 143
Periplus of the Erythraean Sea 82, 102
Piggott, Stuart 1
Pliny 88, 136
Possehl, Gregory L. 4, 148
Prasad, A.K. 123, 173
Prasad, Kameshwar 4
Purāṇas 74, 139
Puri, K.N. 61

Raghuvaṁśa 115
Rājataraṅgiṇī 116
Rāmāyaṇa 110, 114-16
Raschkey, Manfied G. 136
Ray, Niharranjan 115, 126
Raychaudhuri, Tapan 177
Rhys Davids, T.W. 148, 152, 161
Ritti, S.H. 76, 82, 84, 88, 100, 103
Roy, Sitaram 44, 49, 123
Roy, T.N. 35-38, 42, 125
Rydh, Hanna 62

Sachau, Edward C. 120
Sahai, S. 138
Saletore, B.A. 171
Samarāiccha Kahā 115-17
Śaṅgama literature, granaries in 105; on Korkai 106
Sankalia, H.D. 65, 74, 79-81
Santoso, S. 137
Sarkar, H. 12, 95-100, 161
Sarkar, H.B. 9, 127, 137
Sarma, D. 165, 170
Śāstrī, K. Sāmbaśiva 140
Śāstrī, T. Gaṇapati 171
Sen, Madhu 115
Sénart 143
Shah, D.R. 73
Sharma, K.K. 47, 48
Sharma, R.S. 25, 129, 137-39, 141-42, 162, 165-66, 169-70, 173-74, 176
Sharma, Y.D. 4, 18, 22, 58, 65, 79-80, 98, 102, 132
Shastri, A.M. 109-10
Shrimali, K.M. 22, 124, 130, 154
Si-Yu-Ki 26, 33, 39, 41, 46-47, 51-53, 55-57, 68, 71, 86, 96, 101, 118-19, 151, 172; *see also*, Fa-hsien, Hsüan Tsang
Śilparatna 171
Silva, Roland 136
Singh, B.P. 35-36
Singh, Vijay 162
Singh, Y.B. 124-25
Sinha, B.P. 44, 51-53
Sinha, K.K. 29, 35, 41
Sircar, D.C. 124, 142, 154, 158, 160, 169-70

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Skanda Purāṇa 171
Spooner, D.B. 1, 2, 44
Śrī Kumāra 171
Srivastava, K.M. 40-41
Stede, William 148
Strabo 136
Subbarao, B. 65
Subrahmaniam, R. 93
Sulaimar 119, 151-52
Śūnya Purāṇa 174
Suraj Bhan 18

Takakusu, J. 163
Thakur, V.K. 4
Thapar, B.K. 85
Thapar, Romila 4
Thaplyal, K.K. 124-25
Trenckner, V. 143, 150

Udyotana Suri 115
Upadhye, A.N. 115

Vajpeyi, Raghavendra 154
Vālmīki 110, 114, 116
Vāmana Purāṇa, 134
Varadarajan, Lotika 138
Varāhamihira, on agriculture 170-72; on calamity for city dwellers 111-14; on social unrest 139; on urban decline 109-14, 180
Varma, B.S. 53
Vasudevahiṇḍi 116
Vātsyāyana 115, 178
Vāyu Purāṇa 115
Verma, H.C. 119
Verma, T.P. 25, 33
Vīramitrodaya 140
Viṣṇudharmottara Purāṇa 173
Vividhakalpa Sūtra 110
Vṛkṣa Āyurveda 172-73

Waddell, L.A. 1, 51
Walker, Michael J. 137
Watters, T. 119, 140
Wheeler, Mortimer 2, 8, 85-87, 102-3
Whitehouse, David, 137
Winternitz, M. 115-16
Wojtilla, Gy. 154, 171-75
Wrigley, E.A. 3, 136, 149

Yadav, Jhinakoo 115-17
Yadava, B.N.S. 5, 154, 171, 174
Yamazaki, Toshio 108-9, 175
Yazdani, G. 91-92

Zunderman, V. 120

PLACE-NAMES*

ADIYAMANKOTTAI 106
Afghanistan 8, 127, 135
Afrasiyab 6
Africa 137
Agra 26
AGROHA 19
AHAR 123
AHICCHATRĀ 10, **21-25**, 27, 120; decline of 180; horizontal excavations at 3, 180; literary evidence and 7; migration of brāhmanas from 160-61, Appendix 1
Ahmadnagar 80
Ahmedabad, Appendix 1
Aihole 172
AJARAM 133
Akrūreśvara, Appendix 1
ALAGARAL 103-4
Alakā 110
Alakananda 110
Alexandria 136
Allahabad 30, 32
AMARAVATI 95-98; purchase of Jetavana depicted at 162
Ambala 18-19
AMBARI 59; compared with Sisupalgarh 59
AMRELI 72, Appendix 1; dies from 126
Amritsar 154
Amti, Appendix 1
Ānandapura, Appendix 1
Anantnag 14
Ānarttapura, Appendix 1
Andhra Pradesh 123, 137, 160, 168; urban growth and decay in **87-100**, 106, 179; Buddhist contribution to urbanism in, 100; Byzantine coins in

* Excavated sites appear in capital letters. Numbers in bold type indicate detailed treatment.

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129; merchants managed land in 142; Roman objects from 136
Aniruddhapura 160, Appendix 1
Ankleśvara, Appendix 1
ANTICHAK 123-24; crucibles at 128; Buddhist monastery at 162
Arezzo, *see* Arretium
ARIKAMEDU 2, 6, 7, 9, 100, **102-3**, 137, 179; section of Fig. 23; *see also* beads, rouletted ware, Nagarjunakonda, Vīrapatanam
ARNI 74-75
Arretium 102
Arunavati 74
Aśmaka 112
Assam 59, 165, 168-69
ATRANJĪKHERĀ 3, 7, 10, **21-23, 179-80**; schematic section of Fig. 4
Aurangabad 76, 80
Avanti, Varāhamihira on its end 110
AWRA, **66**, 136, 153
AYODHYA **33,** 180; coins at Ganwaria, 40, Piprahwa 40 and Sringaverapur 31; Al-biruni on 120; *Kuvalayamāla* on 116; migration of brāhmaṇas from 160; as a pre-Kuṣāṇa town 120; *Raghuvaṁśa* on the decline of 115; Vālmīki's description of 114-15; *see also* coins

Bactria 134
Bagmati 47
BAHAL 78-79
Bahraich 29
BAIRAT (also called Viratnagar) **60-61**, 116
BALIRAJGARH 48
Ballia 7, 28, 41
Bāmanphalia, Appendix 1
Banaras 140
BANAVASI **86;** brāhmaṇa migrations from 160, Appendix 1; Varahamihira on we decline of 110
BANGARH 58-59
Bangladesh 59, 158; brāhmaṇa migrations from 160; Buddhist monasteries in 122, 162-63; land grants in 170; urban decline in 108-9
Bankura 58
BARA 19
Baramula 14
Bareli 22
BARGAON 1
Baroda 72, Appendix 1
BASARH 1, 44; *see also* Vaishali
Basti 39
BATESVARA 26
Bay of Bengal 57, 59
Begram 8, 127, 179; *see also* ivories
Belgaum 84
Bengal 59, 168-69, 174
BESNAGAR **67**, 120, 126, 128; *see also* dies, crucibles
Bettiah 48
Bhagalpur 53, 157, 162
Bhandara 76
Bharatpur 60
Bharhut 120, 161-62
Bharuch, *see* Bharukaccha
BHARUKACCHA 71, 82, 120; brāhmaṇa migrations from 160, Appendix 1; *see also* Ter.
Bhavnagar 71, Appendix 1
Bherajjika, Appendix 1
BHIR MOUND, *see* Taxila
BHITA 6, 7, **32,** 59, 65, 125, 127, 130, 161, 181
BHOGAVARDHANA, *see* BHOKARDAN
Bhojpur 50
BHOKARDAN 7, **76-78**, 128, 132, 179; crucibles from 128; section of, Fig. 19
Bhramaraśālmali 153
Bhubaneswar 56
Bidar 93
Bihar 42, 48, 50, 59, 100, 122, 130, 138-39, 159
Bihpur 157
Bijnor 24
Bikaner 62
Bilaspur 68
BODH GAYA **53,** 120, 122, 163; *see also* Gaya
Bodhipadraka 163
Bogra 165
Borjai, Appendix 1
Bornea 9
BRAHMAGIRI **85,** 86-87, 100-101; *see also* Kannattur, Nagarjunakonda
BRAHMAPURI **79-80**, 100; *see also* Roman Empire, Nagarjunakonda
Brahmaputra 59
Broach, *see* Bharukaccha

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Bulandashahr 20
BULANDIBAGH 2
Burma 138
BUXAR 7, **50-51,** 59

Cairo 124, 137
Calcutta 57, 96
Cambay 72
Cambodia 137-38
Candrapura 158-59
Carmmāṅka 155
Central Asia, and the Guptas 135-36; India's trade with 8, 35, 72-73, 135-36, 178; towns in 6-7, 135; its trade link with Taxila 11, 135; *see also* trade
CHAKANNAGAR KHEDA 20
Chambal 68
CHAMPA **53, 55-56**, 59, 116, 120, 181; section of, Fig. 15
Champaran 48, 123
CHANDAVARAM 97; *see also* Amaravati
CHANDRAKETUGARH **57-58,** 179
CHANDRAVALLI **85-86**, 87, 100-101; section of, Fig. 20; see also Kannattur, Nagarjunakonda
Chapra 42, 44
CHECHAR-KUTUBPUR 44
Chhattisgarh 63, 169
Chidambaram 106
China, 119, 129-30, 182
Chingleput 100-101
CHIRAND 3, 7, **42, 44-45,** 59, 179-80; section of, Fig. 10
Chitaldrug 85
Chitradurg 85
Chittorgarh 61
Chota Nagpur 128
Cochin China 9
Coimbatore 106
Comilla 162
Coromandel Coast 102
Cuttack 123, 163

DANGWADA **68, 70**
Daśapura 70, 120, 160, Appendix 1; *see also* Mandasor
DAULATPUR **19-20**
Deccan 82, 91, 100, 115, 133-34, 139, 147, 155, 168, 178
Dehradun 24
Delhi 27, 93, 173-74
Deoria 164
DEVNIMORI, dies from 126; crucibles from 128
Dhammanagara 143-44, 152, 160; *see also Milinda-Pañho*
Dhānyakaṭaka **95-96**, 100
Dhar 70
DHARANIKOTA **95-96**
Dhārapura, Appendix 1
Dharmapuri 106
DHATVA **71,** 132-33
Dhauli 56; *see also* Aśoka
Dhenkanal 163
Dhulia 82
DHULIKATTA 7, **88-89,** 123, 178; *see also* coins, coin-moulds, granaries mint
DIHAR 58
Diu, Appendix 1
Dvīpa, Appendix 1
DWARKA 74

East Godavari 95
East Khandesh 78
East Pakistan 142, 160
Egypt 3, 8
ERAN **64**, 120; 3268 punch-marked coins at, 64
Etah 20-21
Etawah 20
Ethiopia 137

Farrukhabad 21, 26

Gandak 44, 48
Ganga 28, 30, 39, 44, 50, 58, 119
Gangetic plains 60, 62, 135, 138, 168, 170, 179
Ganjam 56
GANWARIA **40-41**, 59, 179
Gauripura 157
Gaya 50, 53, 108, 119, 162
Ghaggar (identified with Sarasvatī) 62, 134
Ghazipur 39
GHURAM 16
Girinagara, *see* Girnar
Girinirjhara, Appendix 1
Girivraja, Varāhamihira on its decline 110
Girnar 160, Appendix 1

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Gomūtrikā, Appendix 1
Gonarda, Varāhamihira on its decline 110
Gonda 29
Godavari 79-80, 95-96
Gorakhpur 39, 41
Greece 183
Gujarat 70-71, 155, 168; brāhmaṇa migrations from 160; land grants in 168-69; migration of Silk weavers from 154, 182; Roman objects from 136; Somanātha temple in 164-65; step wells in 173; trade with central Asia 72-73 and the Roman World 72-74; urbanization in 71-74, 83, 179
Gulbarga 84
Guna 63
Guntur 95-96, 98
Guwahati 59
Gwalior 62, 129

Haryana 119; urban settlements in 10, 18-20, 27, 179
Hastavapra, Appendix 1
HASTINĀPURA 7, 10, **21**, 116, 120, 179-80; schematic section of, Fig. 3
Hāthab, Appendix 1
Hathial 11
Hazaribagh 153
Himalayas 168
Hindustan 165
Hissar 19
HULAS 24
HULASKHERA 28-29
Hyderabad 82, 91

Iberian Peninsula 3
Indonesia 137-38
INDRAPRASTHA 7, 120
Indus 3, 111, 148
Isila 85; *see also* Brahmagiri
Italy 179

Jabalpur 62, 124
JADERUA 62
Jagadhari 119
Jaipur 60-61
JAJMAU, *see* Yayātipura
Jambūsara, Appendix 1
Jammu and Kashmir 13-14
Janakpur 110
JAUGADA 56; *see also* Aśoka, iron, Sisupalgarh
Java 9, 137-38
JORWE 79
Junagadh 74, Appendix 1
Junnar 77, 132, 161

Kabul 127
Kaira 72, Appendix 1
Kalinga 168
Kaliṅganagara 56
Kalyan 77
Kamrup 59
Kaṃsakāragrāma 154
KANAUJ 10, **26-27**, 115, 120; brāhmaṇa migrations from 160, Appendix 1
KANCHIPURAM 100-101; *see also* coins, Roman Empire, Ujjain
Kanheri 77
KANNATTUR 101-102; *see also* Brahmagiri, Chandravalli
Kanpur 28
Kānyakubja 120, Appendix 1
KAPILAVASTU **40**, 118-20, 160; *Mahāvastu* on occupations of the people of 143-44, 178; *see also* Piprahwa
Kapiśā 120, 127
Karad (Karahāṭaka) 76, 160
Karahāṭaka see under Karad
KARAIKADU 102
Karimnagar 87-88
Karle 77, 161
Karmakāragrāma 154
Karṇasuvarṇa 162
Karnataka 110, 168, 171; brāhmaṇas migrating from 160; Hsüan Tsang on its deserted towns 86-87; Roman objects from 136, 182; urban growth and decay in 84-87, 106, 110, 179
KARVAN (ancient Kāyāvarohaṇa) 72
Kaśahṛda, Appendix 1
Kāsandrā, Appendix 1
Kāsara, Appendix 1
Kāsaragrāma, Appendix 1
Kashmir 110, 124, 136; an exception to coin-scarcity 123; trade link with Taxila 11
Kāśī 147
KASIA 127, 164; *see also* glass, Kuśīnagara;
Kaṭāhadvīpa 116

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Kathiawar 71-74
KATRAGARH **47-49**, 59, 179-80; section of, Fig. 12
KAUNDANPUR (identical with Kauṇḍinyapura) **75-76**, 132-33, 155, 179
Kauṇḍinyapura, *see* KAUNDANPUR
KAUŚĀMBĪ 3, 7, 21, **31-34**, 59, 63-64, 116, 120, 133, 179-80; section of, Fig. 7; *see also* coins, Ghoṣṭārāma monastery, Malhar, Nasik, Sringaverapur
KAUSUM 80
Kaveri 101, 103-05, 111, 168
KAVERIPATTINAM 6, 7, **104**; *see also* Colas, Nagarjunakoṇḍa
KAYATHA 65, **67-68**. *see also* ivories, NBP
Kāyāvarohaṇa, *see* KARVAN
Kekaya 112
Kerala 168; absence of urbanism in 106
KESARAPALLE **96-97**; section of, Fig. 22; *see also* chalcolithic, megaliths, Nagarjunakonda, rouletted ware, Yeleśwaram
KHAIRADIH 3, 7, 28, **41-43**, 59, 128, 179-80; schematic section of, Fig. 9; *see also* iron, crucibles, furnaces, Yayātipura
Khajuraho 120
Khariakuam, Appendix 1
Kheṭaka, Appendix 1
Kikkatāputra-grāma, Appendix 1
KOLHAPUR 79, 100, 132
Kolhapuri 80
KONDAPUR 7, 82, **91-92**, 99; hoard of 2000 coins at 91; *see also* beads, furnaces, mint, Nagarjunakonda, Ter
Konkan 86, 141
Kopia 179
KORKAI **105-6**; *see also* Pāṇḍyas
Kosala (South) 62, 169
Koṭivarṣa 108-9
Koṭumbara 147
Krishna 89, 90, 92-93, 95-96, 98, 100
Kṣirasara-grāma, Appendix 1
KUDAVELLI **92**, 129, 137; *see also* coins
Kukad, Appendix 1
KUMRAHAR 1, **50-51**, 59
Kurnool 92
Kurukshetra 19-20, 134
KUŚĪNAGARA **41**, 119, 127, 161, 164; *see also* Kasia
Kuśinārā 120
Kusumapura 51; *see also* PĀṬALIPUTRA

LADMUD 81; *see also* Nevasa
Lalitpur 140
Lampaka 120
LAURIYA-NANDANGARH **48, 50**, 123; *see also* Aśoka, coins, lead, mint
Lavaṇatailika 155
Lohanagara 155
Lohigakakṣa-pathaka, Appendix 1
Lucknow 28
Ludhiana 14-16

Madhubani 49
Madhukajjhari 155
Madhyadeśa 135
Madhya Pradesh, brāhmaṇa migrations from 160; land grants in 168-69; urban growth and decay in **62-71**, 83, 110, 135, 179
Madras 96, 130
Madurai 143-46
Magadha 51, 52
MAHABIR GHAT 52; section of, Fig. 13; *see also* PĀṬALIPUTRA.
Maharashtra 168; brāhmaṇa migrations from 160; land grants in 169; Roman objects from 136; urban growth and decay in **74-84**, 107, 179
Mahasthangarh, *see under* Puṇḍravardhana
Mahbubnagar 89, 92, 129, 137
MAHESHWAR (identified with Mahiṣmati) **65-66**, 83, 128; *see also* crucibles, glass
Mahiṣmati, *see under* MAHESHWAR
Mahuva, Appendix 1
Mainamati (Paṭṭikera) 162
Malaya 9
MALHAR 63; on trade route from Kauśāmbī 63
Malkapuram 142, 160
Malwa 66, 68, 154, 168
Mandasor 66, 70; brāhmaṇa migrations from 160; silk weavers of Gujarat at 70, 154
MANJHI **42, 44**, 59, 179-80
MANWAN 29
MASAON, *see* MASON

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MASKI 67, **85**
MASON 7, **39**, 59
Matasara, Appendix 1
MATHURA 3, 7, 10, 12, 14, 16, 21, **25-28**, 64, 110, 120, 129, 135, 160, 180; schematic section of, Fig. 5; *see also* coins, Taxila, trade, Vidisha, Sonkh
Medak 91
Mediterranean 86
Meerut 20-21
Mehrauli 173-74, 184
Mehsana 74, Appendix 1
Middle East, India's trade with 124, 137
Midnapur 57
Mithila 110, 116
MOHENJO-DARO 3
Moradabad 20
MORADHWAJ **24-25**
Muzaffarnagar 20
Muzaffarpur 47
Myos Hormos 136
Mysore 85-86

Nagapattinam 164
NAGARA **72-73**, 179; section of, Fig. 17; *see also* iron, Roman
NAGARI (identified with Madhyamikā) 61-62
NAGARJUNAKONDA 3, 82, 89-90, 92, 96, **98-100**, 104, 161; *see also* Arikamedu, Brahmagiri, Brahmapuri, Chandravalli, Kaveripattinam, Kesarapalle, Kolhapur, Kondapur, Sisupalgarh, Ter
Nagarjunasagar 98
NAGDA 70
Nagpur 75, 77-78
NALANDA 1, 50, 52, 71, 125, 127-28, 162-63, 167
Nalgonda 89
Nanded, Appendix 1
NANDIPURA, *see* NANDUR
NANDUR 64-65; on trade route from Kauśāmbī to Nasik 64; *see also* Bhita, coins, seals, Vaishali
Narmada 65, 111
NASIK (ancient Nāsikya) 64, 76, **79, 82**, 128, 132, 161, 179; *see also* crucibles, Kauśāmbī, Ter
Nāsikya *see under* NASIK
NATTAMEDU 102-3; *see also* Arikamedu
Nausari, brāhmaṇa migrations from 160
NAVDATOLI 65, 128; *see also* crucibles
Nepal 110
NEVASA 76, **80-82**, 128, 132, 179; *see also* agriculture, crucibles, iron, NBP, Ter
New Delhi 20
Nidhanpur 170
NOH **60**, 179-80; *see also* furnace, iron, NBP

Oc Eo 9, 137; *see also* beads
Orissa 56, 59, 112, 120, 168, 174, 179; land grants to monasteries in 163-64; Roman objects from 136.
Osmanabad 81
Oxus 135

Padmāvatī 120
Pādrā, Appendix 1
Pagara 70; *see also* coins
PAHARPUR 6, 128, 162; *see also* furnaces
PAITHAN 76, 77, **80**, 82, 116, 132, 179; *see also* NBP, Ter, trade
Pakistan 2, 3, 10-13, 120, 135
Palar 101
PALLAVAMEDU 101
Panadarśī, Appendix 1
Pātala 120
PĀṬALIPUTRA 1, 7, **51-52**, 116, 120, 140, 160-61, 180-81; brāhmaṇa migrations from, 160-61
Patiala 16
Patna 46, 50-51
Paṭṭikera, *see* Mainamati
PAUNAR **75**, 155
PAUNI **76-77**, 179; section of, Fig. 18
PEDAMARRUR 89
PEDDABANKUR 87-88
Persia 136
PERUR 106
Petlad, Appendix 1
Phoenician 9
PIPRAHWA **39-40**, 161; *see also* coins
POLAKONDA 89
POLUVANPATTI 106
Pompeii 77, 127, 179; *see also* ivory
Pondicherry 9, 102, 117, 137, 171
Poonpoon 44

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PRABHASPATAN 74; *see also* coins
Prakasam 97
PRAKASH **82-83**, 128; *see also* Maheshwar, Nevasa, Tripuri, Ujjain
Pratiṣṭhāna 132; *see also* PAITHAN
Pravarapura 75
Prayaga 110, 120
Punarbhava 58
Puṇḍra 112
Puṇḍravardhana 158;
artisans migrating from 165 f;
brāhmaṇas migrating from 160
Punjab, less of coin scarcity in 123; urban settlements in 10, 14-18, 27, 135, 179; *see also* Kashmir
PURANA QILA 20, 180
Puri 56
Purushapura 120
Puṣyaśāmbapura, Appendix 1

Raichur 85
RAIRH **61**, 82; *see also* coins, Ter
Raisen 64
RAJA KARNA KA QILA 20
Rājagṛha, *see* Rajgir
RAJAHMUNDRY 95
Rajasthan 60, 117, 168; cities and towns in **60-62**, 133, 165, 179; less coin scarcity in 123;
step wells in 173; trade in 129
RĀJBĀḌĪḌANGA 162
RAJGHAT 3, 33, 34, **35-39**, 59; section of, Fig. 8; *see also* coins, textiles
RAJGIR 50, **52-54**, 59, 110, 120, 143-44, 160, 178-79; section of, Fig. 14; *see also Mahāvastu*
Rajshahi 162
Raktamṛtikā-*vihāra* 162
Rāmagrāma 118-19
Ranchi 138
RANG MAHAL **62**, 126, 134; *see also* dies
RANIHAT 24
Ratnadvīpa 116
RATNAGIRI 123, 125, 128, 163-64; *see also* crucibles, seals
Rawalpindi 11
Rāyaka 140
Red Sea 136
Rishikesh 24
Rishikulya 56
Rohiṇī 119
Rome 183
Ropar **16-18**, 27, 180; section of, Fig. 2
RUNIJA 70-71
Rupnarayan 57

Sādhi, Appendix 1
Sagar 64
Saharanpur 20, 24
Śākala 120, 143, 147-48
SALAURA 19
SALIHUNDAM **93-95**; *see also* Arikamedu, rouletted ware, Tamluk
Saloṇapura 164
Sāmbeja, Appendix 1
SAMBHAR 126
Saṃgapurī, Appendix 1
SANCHI **66-67**, 120, 161-62; *see also* Aśoka, coins Jetavana.
SANGHOL **14-15**, 133, 179-80; *see also* Hūṇas, mint.
Saṅkheda, Appendix 1
SANKISA 21
Sannathi 84
Saran 42
Sarasvatī (identified with Ghaggar) 62, 134
SARNATH 39, 120, 161, 164
Saryu 42, 111
SATANIKOTA, **92-94**; schematic section of Fig. 21
Saujkhera, Appendix 1
Saurashtra 71, 110
SEMTHAN 14
SET-MAHET 29; *see also* ŚRĀVASTĪ
Shahpura, Appendix 1
Siddapur 85
Sihor, Appendix 1
Siṃhaladvīpa 116
Siṃhapura 110
Siṅhapura, Appendix 1
Sind 155
SINGH BHAGWANPUR 18
Śirīśapadraka, Appendix 1
SIRKAP, *see* TAXILA
SIRSUKH, *see* TAXILA
Sisodra, Appendix 1
SISUPALGARH **56-57**, 59, 100; *see also* coins, iron, mint, Nagarjunakonda
Sitapur 29
Siyadoni 140
SOHGAURA 7, **39**
Somapura 162

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Son 111
SONDHI 70
SONKH 25, 27-28, 180; *see also* Kanauj, Mathura, Yayātipura.
SONPUR 50, **53**, 59
South Arcot 102
South-East Asia, and trade with India 8-9, 116, 127, 129, 137-38, 179, 182; India's cultural relations with 137
Śraddhikā, Appendix 1
ŚRĀVASTĪ 7, **29-30**, 59, 116, 118, 120, 127, 160-61, 164, 179; brāhmanas migrating from, 160; section of, Fig. 6; *see also* Jetavana
Śrī-Valabhī, Appendix 1
Śrikakulam 93
Śrīmad-Ānandapura, Appendix 1
SRINGAVERAPUR 7, **30-32**, 120, 180
Sri Lanka 163; 30,000 Byzantine coins in 136, 181
Srinagar 14
Srughna 119; *see also* SUGH
SUGH **18-19**, 119
Sumatra 116, 163
SUNET **15-17**; schematic section of, Fig. 1; *see also* mint
Surat 71
Suratgarh 62
Suvarṇadvīpa 116; *see also* Sumatra
Suvarṇakāragrāma 155
Sylhet 158, 170
Syria 127

Tadjikistan 135
Tagar, *see* Ter
Takṣaśilā, *see* TAXILA
Talcher 163
Tāmbraparṇī 105
Tamil Nadu 168; land grants in 164; Roman objects from 136; 'temple towns' in 107; urban growth and decay in **100-7**, 179
TAMLUK **57**, 110, 120, 136, 153, 179; *see also* Ayodhya, rouletted ware, Varāhamihira
TĀMRALIPTI 57; *see also* TAMLUK
Tanjore, Chinese coins from 130; *see also* Thanjavur
Tapti 71, 82
TARADIH 53, **122-23**; *see also* BODH GAYA, copper, pounder
Taredi, Appendix 1
TAXILA 1, 3, **11-13**, 110, 116, 120, 126, 128-29, 133, 135, 179-80; convergence of trade routes at 11-13, 35-36, 135; artisanal production at 12; *see also* coins, crucibles, dies, mint
Tehri 24
TER 76-77, **81-82**, 127, 132, 179; identified with Tagar 81; largest trading emporium in South 81-82; its lamps at Nasik, Rairh and Nevasa 82; *see also* coins, ivories, terracottas, Bharukaccha, Kondapur, Nagarjunakonda, Paithan
Terna 81-82
Tewar 110; *see also* Tripuri
THANESAR 10, 119, 120
Thanjavur 104, 130, 164
Tipperah 169
Tīrabhukti 46-47
Tiruchirappalli 103-5
Tirumūlavādam 164
TIRUKKAMBULIYUR 105; *see also* granaries, silk
Tirunelveli 105
Tosali 56
Trāmadi, Appendix 1
Travada, Appendix 1
TRIPURI **62-63**, 83, 110; *see also* querns
Trivandrum 140
TUMAIN (TĀMBAVANA) 63-64; *see also* coins, iron
Tungabhadra 85, 92-93
Twenty-four Parganas 57

Udumbaragahavara, Appendix 1
Ujbekistan 135
UJJAIN 7, 67-70, 77, 80, 83, 100, 110, 160, 179; brāhmaṇas migrating from 160; schematic section of, Fig. 16; *see also* coins, furnace, trade, PRAKASH, Ujjayinī
Ujjayinī 65, 68, 70, 110, 116, 120; *see also* coins, Dangwada, Maheshwar
URAIYUR 104-5; *see also* Coḷas, textiles, Roman
USSR 135
Uttar Pradesh 7, 139, 159, 165; brāhmaṇa migrations from 160; less coin scarcity in the western part of 123; Buddhist monasteries in 122; land

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grants to chamars in 159; trade in 129; urban growth and decay in 10, **20-43**, 100, 130, 135 f., 179

VADGAON-MADHAVAPUR 7, **84-85**, 179; *see also* coins, mint
VADNAGAR (also Vṛddhanagar) 74, 126; brāhmaṇa migrations from 160, Appendix 1; *see also* dies
Vadner, *see* Vadnagar
Vadodara 72
VAISHALI 1, 6, 7, **44, 46-47**, 59, 120, 132, 160-61, 180-81; identified with Basarh 44; brāhmaṇa migrations from 160-61; section of, Fig. 11; seals from 6, 32, 46, 65, 108, 125, 130; *see also* coins, Tīrabhukti
VALABHI 71-72, 74, 120; brāhmaṇa migrations from 160, Appendix 1
Vanavāsi 110, Appendix 1; *see also* BANAVĀSI
Vaṅgāla 159
Vaṃśakaṭa, Appendix 1
Vāraka *maṇḍala* 109
VARANASI 7, **35-37**, 39, 108, 110, 115, 120, 125, 130, **180-81**; *see also* Kāśī, RAJGHAT
Vasavad, Appendix 1
VASAVASAMUDRAM 101
Vasumdhara 93
Veṇḍamati-*vihārikā* 162
Verawal, Appendix 1
Vetālika (Vatālika) 155
Vidarbha 75, 154, 168
Videhanagarī 110
Vidisha 64, 67, 110, 120; brāhmaṇa migrations from 160, trade link with Mathura 64; *see also* BESNAGAR
Vijaya-Aniruddhapuri, Appendix 1
Vijayapurī 90, 98
Vijayawada 96
Vikramaśilā 162
Vinchu-Daśapura, Appendix 1
Vindhyas 6, 168
VĪRAPATANAM, *see* ARIKAMEDU
Viratnagar, *see* BAIRAT
VIRBHADRA 24
Visalia, Appendix 1
Vṛddhanagara, *see* VADNAGAR

Warangal 89
Wardha 75
West Bengal 57-59, 108-9, 136, 168, 174, 179
West Dinajpur 58
West Nimar 65
Western Asia 8, 136; trade links with Taxila, 11-12.
Western Europe 149, 183

Yamuna 20, 27, 111, 119
Yavatmal 74-75
YAYĀTIPURA 28; *see also* Khairadih, Sonkh
YELEŚWARAM **89-90**, 96; *see also* Viṣṇukuṇḍins, Roman, Kesarapalle, Nagarjunakonda

SUBJECT

Ābhīras 110
Acyu 22
Ācyuta 22
Ādi Siṃha 153
Ādi-Varāha 124
Agastya 111
agriculture, and urbanization 5f, 123f, 138; and artisans 148-49, 166-67, 172; iron and yield in 149, 174; merchants undertaking 153; land grants to labourers in 158-59; brāhmaṇa migration and technology of 160-61, 170-71; urban decline and expansion of 165-77, 184-85; land grants for increasing 168-77; varṇa system and expansion of 170-77; paddy production 172-73; animal husbandry and 173; innovation in the techniques of 173-74; irrigation facilities and 173-74; increasing varieties of cereals 174; and state formation 168-69, 175, 184-85; and rise of feudalism 175-76; expansion and categorisation of peasants

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175-76; exhaustion of hinterland and 181; cash transactions in 88; *see also* cereals, *Arthaśāstra* (of Kauṭilya), paddy, peasants, pulses, rice, wheat
Ajātaśatru 53
Alaud-Din-Khalji 93
Alexander 3, 121
Āmrapālī 46
Anastasius 92
Anāthapiṇḍika 161; *see also* Jetavana
Andhra Ware; *see* pottery, russet-coated ware
Apollodotus II 16
Arab geographers, on decline of urban centres in India 119-21
Arabs 138, 52
Aristobulus 3
Ārjunāyanas 114
army, de-urbanization and 152, 182-83; from Maurya to Kuṣāṇa times 150-51; of Mauryas and Harṣa 151; payment of 151-52, 183; in pre-feudal states 150-51; and towns 150-51, 182-83; Sulaiman on Indian 151; *see also* warriors
Arretine ware, *see* pottery
artisans 12, 33, 50, 76, 81, 83, 108-9, 122-24, 131, 139, 166-67, 179; take to agriculture 165f, 172f, autonomy of 166, 182; army and 150-51, 182-83; in Buddhist works 143-51, 178; categories of 147-49, 166; and commodity production 35, 83, 151, 166, 179; as components of town population 142-46, 165-67; their contribution to economic growth 149-51, 172f, 184; de-urbanization and 153-54, 165-67, 182-84; made gifts to brāhmaṇas 160; guilds of 147, 152-53, 166-67, 183; land grants to 158-60; localisation of 150-51, 154-55, 184-85; peasants and 148-49, 151, 165f, 172, 178; payment of taxes and 141, 151, 182-83; and political power 108f, 134f, ranks in 146; rent from 185; attached to kings, merchants, monasteries and temples 129, 166, 183; in production of bronzes 128; migration of 154-55, 165f, 172f, 184-85; ruralisation of 158-59, 165f, 170f; seals of 33, 46, 125, 179; become untouchables 154; and urbanism 5f, 123-31, 156-57; villages and, 154-57; support Buddhism 161-62, 179; as part of *jajmānī* system 166-67, 184; impact of trade decline on 181-84; and feudal polity 184-85
Ārya-Avalokiteśvara 163
Aśoka 71; and army 150; Bairat inscription of 60; Dhauli edict and 56; Jaugada Rock edicts of 56; Karnataka edicts of 85; pillars at Allahabad and Lauriya-Nandangarh 48; palace at Pāṭaliputra 51; and Sanchi 66
Audumbara 16; *see also* coins
Augustus 77, 86
Augustus Caesar 88
Augustus Hadrianus 68

Bactrians as founders of Sirkap city 71
Bahamanis 79
Balaputradeva 163
Balhāra 152
Balligava 164
Barbaras 110
barley; *see* agriculture
beads 61-62, 75-76, 86, 88, 101; factories of 147; of glass 12, 19, 35-37, 42, 63-64, 79-81, 87, 96, 99, 100-2, 105; and iron technology 179; of semiprecious stones 37, 40, 60, 64, 66, 70-71, 78, 79, 84, 87-89, 95, 99, 101-3, 106, 122, 127, 149, 179, 181; in stone 37, 58, 96, 127, 147, 181, 183; terracotta 37, 58-59, 79, 96, 122; trade in 9, 127, 137, 179; and urbanism 4-8, 126-27, 181, 183; from Champa 53, 55; from Chandraketugarh 58; from Dihar 58; from Ganwaria 40; from Kondapur 99; from Piprahwa 40; from Rajghat 35-37; from Taxila 12; *see also* glass
bellow-pipes *see* smithy
Bhamala monastery at Taxila 13
Bhāskaravarman 170
Bhaṭṭāraka 164
Bhauma-Kara 163
Bhavadeva 162
Bhogaśakti 141
black-and-red ware; *see* pottery
blackish grey ware; *see* pottery
brāhmaṇas 111; and agriculture 160-61,

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170-71, 184-85; cultivation of land by 171f; grants to *mahattara* 159; grant of towns to 140-41, 182; land grants to 139-40, 168-77, 183; in the Malkapuram inscription 142; as merchants 142; migrations of 160-61, 167, 170-72, 174, 183-84, Appendix 1, in *nandyāvarta* village 156-57; as non-productive sector 143-44; at the Somanātha temple 164-65; as town dwellers 160; entitled to taxes 175; *see also* artisans, merchants
Brāhmī 64, 79, 88, 89, 93; on coin mould 50; Mauryan 64
brass 145, 154
bricks, structures in 6-7, 10-11, 15, 17, 18, 20-22, 24-29, 31-32, 36, 39, 41, 44, 46, 50, 53, 58-60, 63-65, 72, 75, 80, 85, 88-89, 92, 104
bronze(s) 19, 25, 55, 61, 79, 138, 148; Age 128, 148; crucibles and 128; dies of 126; Hellenistic 127; mirrors of 12, manufactures of 128; from Nalanda, 128; proliferation of 128-31; Roman 136; sculptures 126, 129; seals 62; tools 128; trade in 128-29; *see also* crucibles, furnaces
Buddhasena 163
Buddhism 76, 160-63 *see also* monasteries, urbanization
Budha, a planet 111
bullae 79, 80-82, 136, 147
burnished ware *see* pottery
Byzantine 92, 129, 137

copper coins 136, 182; coins in south India 137, 182
Cālukyá(s) 92, 141
Candrá(s) 162
Candra Gupta I 16
Candella(s) 140, 169
celadon ware *see* pottery
cereals 7, 82 *see also* agriculture
chalcolithic phase, at Dihar 58, Maheshwar 65, Navdatoli 65, Kayatha 67, Bahal 78, Nasik 79, Nevasa 80, Prakash 82, Maski 85, Kesarapalle 96
chamars, land grants to 158-59; part of *jajmānī* system 159
Chinese, coins in India 129-30, 138; and long-distance trade, 180
coins, of Acyu 22; Adivarāha 124; of the Audumbaras 16; of Ayodhyā series at Ganwaria 40, Piprahwa 40, Rajghat 36; Byzantine 129, 136; cast copper 48, 53, 58, 60, 67, 70; Chinese 129-30, 138; Cola 104; Gaṅga 123; gold 25, 116-17, 130, 136-37, 181; Greek 60; Gupta 59, 80, 116-17, 124, 135, 181; *see also* gold coins; Indo-Greek 60, 133; Indo-Sassanian 41, 64; 124; Kauśāmbī series at Kumrahāra 51, Rajghat 36 and Sringaverapur 31; Kṣatrapa 64, 66, 70, 71-73, 75-77, 85; Kumāra Gupta I 124; Kuṣāṇa 10f, 39, 46, 133; *see also* Purī-Kuṣāṇa, gold coins; Magha 33; Mahārathi 84, 86; Maitraka 71-72; *see also* Valabhī; Malwa 61; Mitra 22, 61; Mughal 51; Muslim 86; of Mysore Wadeyars 86; Nāga 62, 64; *see also* Jaderua, Eran; of the Pratīhāras 123; punch-marked, from Andhra Pradesh 87-100, from Bahal 78, from Bairat 60, from Bangarh 58-59, from Besnagar 67, from Bhokardan 76, from Champa 53, from Chandraketugarh 58, Dangwada 68, Eran 64, Hulaskhera 28, Jaugada 56, Kumrahar 51, Rairh 61, Runija 70, Vaishali 46, Vadgaon-Madhavapur 84; Pañcāla 40; Purī-Kuṣāṇa 56-57, 95; Roman 57, 76-77, 80-81, 84-91, 129-30, 136f, 178, 181-82; Sassanian 124; Sātavāhana 65-66, 71, 74-75, 76, 81-82, 85-86, 90-100, 148; silver 64, 124; *see also* Kṣatrapa coins, Tumain; tribal 65; *see also* Audumbara, Ayodhya, Kauśāmbī, Pañcāla, Ujjayinī, Varanasi; Tughlaq 123; Ujjayinī 65, 70, 80; Valabhī 74; Varanasi 36; Vāsudeva's gold 25; Viṣṇukuṇḍin 90; found in excavations at Antichak 123, Bhita 32, Champa 53, Ganwaria 40, in Haryana 18-20, Kashmir 124, at Maheshwar 65, in Punjab 14-16, Ratnagirī 123, Sanchi 66, at Sonkh 25, in South-East Asia 138, Taxila 12-13, at Tripuri 63-64, Tumain 64, in western Uttar Pradesh 21-27; assayers of 148; and coin

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moulds as trait of urbanism 6, 123, 130, 148, 157; devices on seals 124-25, 183; de-urbanization and demonetization 158-59; absence of South-East Asian coins in India 138; their paucity in post-Gupta times 124-25, 130, 181, 183; in granaries 178; large-scale monetization in pre-feudal times 148, 150-51; revival after Turkish invasions 133; and religious structures 123; and trade 124-25, 129-30, 181, 183; and "new urban" phenomenon, 177; *see also* Byzantium, coin moulds, cowries, gold, Guptas, Kuṣāṇas, Kṣatrapas, lead, mints, potin, Sātavāhanas, silver, trade
coin moulds 56, 57, 99, 100, 122, 124, 183
Coḷa(s) 100, 102, 104, 171
commodity production and urbanization 6; *see also* artisans
Constantine 182
Constantius II 92
copper 128, 155; mirror 12, 123; objects 14, 18, 19, 25, 35, 40, 48, 53, 61, 67, 72, 73-75, 87, 89, 93, 103-6; tools 15; vessels 12; workers in 145, 160; *see also* coins, smithy
cowrie as a medium of exchange 123
crafts and urbanism, 5-6, 123f.
craftsmen; *see* artisans
crops, Varāhamihira on 113-14; *see also* agriculture
crucibles 10, 22, 30, 48, 65, 67, 81, 96, 98, 103, 128
Cūḷamaṇivarma-*vihāra* 164
currency 124-25, 130; *see also* coins, cowrie

Daradas 110
de-urbanization 8-9; and agrarian expansion 9; causes of 9; consequences of 9, 143-67; deforestation and 138; features of 184-85; and feudalism 9, 184-85; two phases of 130, 181-85; in Gupta and post-Gupta times 115, 130; *see also* urban decline, urbanization
Devapāla 163
Dharmarajika stupa, at Taxila 11
Dharmasvāmin 163
dies 12, 126; *see also* Besnagar, Devnimori
drains 11, 15, 31, 35, 39, 44, 47, 59, 65, 68, 72, 89-90, 93, 101-2, 106; and urbanism 7
dyeing vats 82, 102, 104; *see also* artisans, textiles

feudalism 117; agrarian expansion and 175; decay of towns and emergence of 167; first phase of 157f, 175; *see also* agriculture, de-urbanisation, Guptas, land grants, monasteries, temples, towns, trade, urban decline, villages
furnaces, 10, 12, 35, 41, 60, 68, 91, 128, 154, 178; *see also* Khairadih, Kondapur, Nalanda, Noh, Paharpur, Rajghat, Ujjain, iron, ovens, smithy

Gāhaḍavāla(s) 31, 164
Gaja-Lakṣmī, on Sātavāhana coins 80; on seals 87
Gaṇeśa 64
Gautama Buddha 41, 46, 138, 143, 161-63, 164
Gautamīputra Śātakarṇi 79, 99
Ghoṣitārāma monastery 33
glass 19, 26, 29, 35-37, 42, 56, 60, 63-65, 71, 77, 79-83, 85-87, 90, 92, 96, 100-6, 122; absence at Bhīta, Kasia, Nalanda, Śrāvastī 127, and Taradih 122; decline in its production 127, 130, 181, 183; factory at Kopia 179; from Maheshwar 65; peak in post-Maurya times 179; polychrome bangles in 130; Roman 136; Syrian 127; trade in goods of 149; as a trait of urbanism 4-8, 127; workers in 147; *see also* beads
glazed ware; *see* pottery
gold 61, 66, 68, 70, 93, 101, 113, 116-17, 124-25; stoppage of its supply 136; beads of 74, 79; Kārttikeya image in 28; smithy 46, 98; *see also* coins
Gondophernes 14-15
Govindacandra 31, 164
granaries 58, 178; coins in 7, 178; at Dhulikatta 7, 178; Harappan 178; at Tirukkambuliyur 105; at Vadgaon-Madhavapur 84; *see also* agriculture
Greek antiquities at Taxila 11-12

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Gupta(s) remains at Ahicchatrā 22, Atranjikhera 22, Bangarh 59, Champa 55, Chandraketugarh 58, in Gujarat 71-74, in Haryana 19-20, Jammu and Kashmir 14, Madhya Pradesh 62-71, Punjab 14-18, Rajghat 36-37, Rajasthan 60-62, Vaishali 44, 46-47, West Bengal 57-59; myth of their golden age 2; urban decline under, 8, 10, 21, 37-39, 132f, 180f, urban decline after 134f, 160-61, 181; structures at Hulaskhera 28-29; seals from Tamluk 57; artisanal and mercantile elements in towns of 108; stagnant land prices under 109; economic conditions under 113-15, 137, 181; gold coins of 116-17, 136; terracottas 126; decline in craft production after 126-27, 181; represent transition in de-urbanization 130; coins of 135, 138; inscriptions of 141; dispersal of urban crafts after 155, 181; *see also* artisans, coins, merchants, trade, urban decline
Gurjara-Pratīhāra 19

Hadrian 99
Han empire 181
Harappans 2, 155, 178, 181
Haricaraṇasena 174
Harihara II 99
Harṣavardhana 10, 27, 125, 151, 172; *see also* army
Hathigumpha 56
Hīnayāna, *see* Buddhism
historical archaeology, colonial stereotypes in, 1-2; de-emphasis on 2-3; and medieval settlements 3, 155; and problems of urban history 1-9; and rural sites 3, 6, 8, 155
Hittite 9
Hūṇas, invasions of 133, 136
Huviṣka 16, 57, 62

Ikṣvākus, of Vijayapurī 90, 96, 98, 99, 104
Indo-Greeks 133-34
Indo-Sassanian, coins at Taxila 13, at Ganwaria 41; at Eran 64; *see also* coins
iron 32, 155; artefacts of 20, 35, 41-42, 48, 50, 53, 57, 63, 64, 66-68, 73, 79, 82, 83, 85, 87-89, 92, 93, 99, 105-6, 128; dispersal of its technology 128, 131, 184; export of 137; and expansion of agriculture 149, 174, 184; impact of its technology on crafts 179; pillar at Mehrauli 174, 184; smelting industry at Dhatva 71; smelting furnace at Noh and Rajghat 35, 60; tools of 6, 10, 19, 24-25, 59, 61-62, 80, 128, 138, 149, 174, 178-79; and urbanization 5-6; workers in 160; from Nevasa 80, from Sanchi 66; from Ujjain 68; *see also* crucibles, furnaces, smithy
Iron age, urbanization in 4, 12f, 123f
ivory ivories 15, 20, 26, 29, 35-36, 42, 53, 55, 56, 59, 61, 66-67, 70, 73, 77, 80, 86, 88, 96, 99, 122; absent at Taradih 122; Bhokardan as centre of carving in 77; from Begram 127, 179; dies of 126; Indian ivory at Pompeii 77, 127, 179; and iron technology 179; Mother Goddess (from Awra) 66; trade in objects of 8, 117, 127, 149; from Ter or Tagara 127; paucity of objects in 130, 183; as trait of urbanism 4-8, 127, 183; workers in 147

Jain establishments, land grants to 165
Jayasena 163
Jayāśrama-*vihāra* 163
Jetavana-*mahāvihāra*, grant of villages to 30, 164; at Śrāvasti 30, 161-62, 164
Jupiter 139

Kadamba(s) 86, 110
Kākatīya(s) 89
Kalacuri(s) 63, 75
Kali Age, descriptions in Purāṇas 139f; social crisis in, 139-40; and urban decline 139f, 181f
Kaniṣka I 29, 62
kaolin ware, *see* pottery
Kardi seed oil 81
Karpūraśrī 164
Kārtikeya, gold image from Hulaskhera 28
kāyasthas 159
Khāravela 56
kilns, 5-6, 22, 65; *see also* furnaces, ovens
Kirātas 157

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Kṛttikā 139
Kṣaharātas 79
Kṣatrapa(s), archaeology of 65, 132f; army under 150; coins from Amreli 72, Bharukaccha 71, Bhokardan 77, Dangwada 70, Eran 64, Karnataka 84-87, Karvan 72, Nagar 73, Paunar 75, Pauni 76, Runija 70, Sanchi 66, Tripuri 63; phase at Maheshwar 65, and Nandur 65; urbanization under 83, 132, 134, 180f; *see also* Kuṣāṇas, Sātavāhanas
kṣatriyas 111, 156; as non-productive sector of town 144; entitled to taxes 175
Kumāra Gupta I, silver coins of 124
Kumāranāga 141
Kumāranandin 161
Kuṇāla stupa, at Taxila 13
Kuṣāṇa(s) urban settlements in Haryana 18-20, 179, Jammu and Kashmir 14, Madhya Pradesh 62-71, middle-Gangetic plains 28-56, Punjab 14-18, 179, Purana Qila 20, Rajasthan 60-62, Sonkh 25, Taxila 11, 13, western Uttar Pradesh 20-27, 179, army under 150; crafts and commerce under 135f, 155; extent of their empire 135; gold coins of 116-17, 136; inscriptions at Mathura 25; stone moulds of, 126; *see also* coins, trade, urban centres, urbanization.

land, stagnant prices of 109; remuneration through subinfeudation of, 159-60; donation of virgin 169f; unequal distribution of 182-83; intermediaries in, 183-85; *see also* land grants, feudalism
land grants, to agricultural labourers 158-59; to artisans and merchants 153-60, 181-85; beneficiaries of 158-60; to brahmanical temples 164-65, 183-84; to Buddhist monasteries 158-65, 183-84; and feudalisation of towns 141, 154-57; Hsüan Tsang on 140; and increasing cultivation 168-77, 184-85; to Jains 165; Kali crisis and 139f; officials addressed in 168-69; and rural revenue 151-52; and social configuration 175-76; and urban process 139f; of the Vākāṭakas 154-55, 168-69; in virgin lands 168-70; *see also* agriculture, feudalism, land, monasteries, temples, urban decline, villages
lead, 50, 61, 71-72, 77, 81, 91, 96-97, 145, 148; *see also* coins, smithy, trade
Lokanātha 169
Lokeśvara 164

Mahāraṭhī coins 84-86
Maheśvara 39
Mahiṣāsuramardinī, plaque of (from Sringaverapur) 31
Maitrakas, 71-72; *see also* coins
Mangalasvāmin 163
Maniyar maṭha 52
Marathas 65; coins of 78
Maukharis 125
Maurya, Candragupta 151
Mauryas, military strength of 150, 172; remains at Bairat 60-61, at Bhita 32, at Buxar 50, in Karnataka 85, at Kumrahar 51, in Maharashtra 75f, at Ranihat 24, at Sringaverapur 31; stupas at 64, at Taxila 11, at Vaishali 46
megaliths, at Arni 75, Chandravalli 85, Dharanikota 95, Kannattur 101, Kesarapalle 96, Maski 85, Pedamarrur 89, Peddabankur 87, Perur 106, Polakonda 89, Tirukkambuliyur 105, and Yeleśwaram 89
Megarian ware, *see* pottery
mercantile activity 33, 113, 122, 137, 141-50, 183-85
merchants 50, 81, 108-14, 122-24, 131, 137, 139, 180; association of 2, 142, 146; in Buddhist works 143-48, 178, 181-82; categories of 147-49; their contribution to economic growth 149-50; de-urbanization and 152-53, 177; make gifts to brāhmaṇas 160; land grants to 141, 153; and management of donated lands 141-42, 153, 167; migrations of 153-55; in post-Gupta Prākrit texts 181-82; and political authority 134, 181-83; in production of bronzes 128; live on profits of trade 139; as

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rural magnates 153, 167; seals of 96, 125, 130, 179; support Buddhism 161-62, 179; support army 182-83; and taxation 141, 151, 182-83; trade decline and 181; *see also* artisans, guilds, land grants, monasteries, trade, urbanization
Mercury 112
metal money *see* coins
Milinda 152
mints 124; at Bhokardan 77, Dhulikatta 88, 123, Ghuram 16, Kondapur 91, Lauriya Nandangarh 50, 123, Nagarjunakonda 99, Sanghol 14, Sisupalgarh 56-57, Sunet 16, Taxila 12, Vadgaon-Madhavapur 85; *see also* coin moulds
monasteries 18, 26, 33, 39, 56-57, 60-61, 66, 69, 71, 91, 97-98; in Andhra Pradesh 100; and artisanal activity 183-84; artisans attached to 129, 141; as centres of consumption 157, 183-84, Chinese pilgrims on decline of 162-63; crucibles in precincts of 128; donation of towns and shops to 140-41; early medieval 122-31; in eastern India 123-24; economic activities of 131, 183-84; land grants and 158-60, 162-65, 183; offering of seals at 125; as self-sufficient economic units 165; subinfeudation in 159-60; *see also* artisans, Buddhism, feudalism, land grants, temples, taxes
monks, and urbanism 161-62 *see also* monasteries, śramaṇas
moulds, 126
Mughal glazed ware *see* pottery
Muslim glazed ware *see* pottery
Muslim invasions, as cause for urban eclipse 132f
muslin, from Arikamedu 102

Nāga, coins from Jaderua 62, and Eran 64
Nahapāna 79
Nikumbha 115
Northern Black Polished ware (NBP) *see* pottery

ovens, 5-6, 68, 92, 101; *see also* furnaces, kilns

paddy 93, 123; *see also* agriculture, rice
Painted Grey Ware (PGW) *see* pottery
Pāla(s) 26, 48, 55, 59, 108, 122-24, 126, 173
Pallava(s) 100f
Pañcāla(s) 22; coins of, at Ganwaria 40
Pāṇḍu(s) 169
Pāṇḍya(s) 105
Paramāra(s) 68,70
Parthians 134; and long-distance trade 180-81; and Punjab 14-15; and Taxila 11-13
Paura (planet) 111
peasants 89, 168-77; differentiation of 175-76; rent from 185; subjection of 174-75, 184-85; and state formation 182-85; surplus extraction from 180; *see also* agriculture, artisans, land, land grants, trade, urban decline
Persians 137
Pīthipati 163
ploughshare 5, 99; *see also* agriculture, iron, peasants
population, and size of settlements 5-7
Poseidon 79
potin 77, 85, 88, 91; *see also* coins
pottery 125-26, 147, 181; Andhra ware 79, 85-86; Arretine ware 95, 100, 102, 104; black and red ware 56, 62, 75-76, 78-80, 85-87, 89, 92, 93, 101-6; blackish grey ware 106; burnished ware 73; celadon ware 9, 59, 75, 78-79, 97, 101-2, 105, 130; glazed ware (Mughal/Muslim) 14-15, 18, 28, 44, 66, 72, 78, 79, 81; Gupta 126; kaolin ware 8-9, 59, 62-63, 67-68, 70, 75, 80, 82, 88, 92, 93; Megarian ware 77; Northern Black Polished ware (NBP) 127; in Jammu and Kashmir 14; in western Uttar Pradesh 20, 22, 24, 25, 27; in middle Gangetic plains 28-30, 33, 35, 39, 42, 44, 50, 53; in eastern regions, 56-59; in Rajasthan 60, 65-68; in Gujarat 74; in Maharashtra 75, 78-82; in Andhra Pradesh 96; Painted Grey Ware (PGW) 2, population estimates of the sites of 5, at Atranjikhera 10; Singh Bhagwanpur 18; Daulatpur 19, in western Uttar Pradesh 20-25, at Bairat 60; red ware 15, 18, 20-21, 29, 39, 41-42, 44, 56, 59, 70, 80,

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86-87, 89, 91, 100; red polished ware 16, 19, 20, 24, 35, 56-57, 62-63, 65, 71-76, 78-79, 81-82, 89, 90, 93, 95, 101, 104, 125-26, 137; red-slipped ware 16, 92; Roman 6, 79-80, 84, 102; rouletted ware 35, 57, 75, 82, 84-86, 93-94, 96-97, 100-3, 104, 129, 136-37; russet-coated ware 75, 84-86, 93, 100, 103-4, 106; Samian ware 72, 79, 81
pounder 123, 173
Prākrit 115, 151, 182
Pratīhāras 26, 70, 151-52, 165
pulses, 82; *see also* agriculture
Pulumāvi 82

querns, from Kaundanpur 75, Kayatha 67, Nevasa 81, Paithan 80, Prakash 83, Salihundam 95, Satanikoṭa 93, Ter 82, Tripuri 83

Rāhu 112
Rājarāja 164
Raja Vishal Ka Garh *see* Vaishali
Rāma 114-15
Rāma Gupta 64
Rāṣṭrakūṭas 26, 80, 133, 152
Rāyakabhaṭṭas 140
red ware *see* pottery
red polished ware *see* pottery
red slipped ware *see* pottery
rent 185
rice 82, 93; *see also* agriculture, paddy, Śalihundam
Roman amphorae 12, 71-76, 81, 86, 100-2; antiquities 74, 79, 102, 136; connections at Vasavasamudram 101, and Yeleśwaram 60; glass bowls 102; pottery 6, 79-80, 84, 102; *see also* Arretine ware, kaolin, Megarian, rouletted, Samian under pottery; *see also* coins, trade, Roman Empire
Roman empire, division of 136-37; military strength of 150; towns in 2; its trade with Andhra Pradesh 81-100, 136, Gujarat 72-73, 136, Karnataka 84-87, 136, Maharashtra 79, 81-82, 136, Orissa 136, Tamil Nadu 100-7, 136, India 129-30, 135, 180-81; *see also* coins, Kusanas, Sātavahanas
rouletted ware *see* pottery
Rudrasena 70
russet-coated ware *see* pottery

Sakas 10-13, 20, 25, 83, 134-35; *see also* coins
Śaktināga 141
Śākyas 119
Samian ware *see* pottery
Samsud-Din Muhammad Saha Bahmani 93
Samudra Gupta 22, 32, 169
Saṅgameśvara Śiva temple 92
Sanskrit 143, 151, 169
Śarabhapūriya 169
Śātakarṇi 75
Sātavāhana(s), army under 150; archaeology of 132f; coins 65-66, 70-71, 74-76, 81-82, 85-86, 90-100, 148; commerce under 135f; flourishing crafts under 135f; de-urbanization after 132f, 179f; land grants to Buddhist church 162; at Tripuri 62-63; urbanization under 74-83, 84-101, 107, 179f; *see also* coins, Kuṣāṇas, Kṣatrapas, Roman, trade, urbanization, urban decline
Saturn 113, 139
sculptures 129
seals/sealings 61, 88; of artisans, merchants and traders 125, 179, 181; of guilds and towns 44, 46, 125, 130; of Harṣa 125; of the Maukharis 125; of the Senas 125; absence of, at Taradih 122; coin devices and 124-25; decline in post-Gupta times 125; of ivory 96; large number (1386) at Ratnagiri 125; in Gupta characters 29, 37, 39; paucity of commercial 130; purposes of 125; on copperplate charters 125; as trait of urbanism 6, 122, 125, 130, 181; findspots: Bhita 32, 65, 125, 130, Gaya 108, Karvan 72, Khairadih 42, Mason 39, Nalanda 125, Nandur 64-65, Piprahwa 39-40, Rajghat 35-36, Sunet 16, Tamluk 57, Vaishali 6, 32, 46, 65, 108, 125, 130, Varanasi 36, 108, 125, 130; *see also* artisans, terracotta, monasteries, temples
Senas 108, 125
Septimus Serverus 90
serfdom 158, 166; *see also* feudalism, land,

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land grant, peasants
sericulture 137, 145, 178, 182; *see also* silk, Silk Road, trade
seṭṭhis, with landed property 141; *see also* merchants, trade
shell industry 19, 24, 36, 64, 66, 68, 70, 74, 76, 81-86, 89-90, 98, 103, 112-13
Sikandar Lodi 28
Śilāhāras 80
silk, weaving at Tirukkambuliyur 105; Road 135; *see also* sericulture, trade
silver 12, 61, 68, 73, 113; *see also* coins
Śiva 115; temples at Dangwada 70, Kudavelli 92; and Nagarjunakonda 99
Śivadāsa 50
Śivi-*janapada* 62, 114
Skandanāga 141
smithy 46, 60, 71-72, 81, 98, 145, 150; at Dharanikota 96, Dhatva 71, Ghuram 16, Khairadih 41-42, Noh 60; and Ujjain 68; *see also* crucibles, metals, furnaces, kilns, ovens
Somanātha 164-65, 167
Somavaṃśī 164
Soter Magas 15
śramaṇas 143, 160; as non-productive sector in towns 143-44
Śrīcandra 158, 170
Śrīpattiśvarasvāmī 106
Śrī-Viśveśvara-Golakī 160
Śrī Yajña Śātakarṇī 80
Śrīkṛṣṇa 74
state formation, agrarian basis of 168-69, 175, 184-85
śūdra 111, 156, 165-66
Sultanate 26, 32, 133, 179
Śuṅgas, settlements of, at Ayodhya 33, Balirajgarh 48, Besnagar 67, Dangwada 68, Ganwaria 40, Haryana 18, Jaderua 62, Katragarh 47-49, Kayatha 67, Manwan 29, Nagari 62, Sringaverapur 30, Tamluk 57, western Uttar Pradesh 20f; terracottas of 126

Tadjiks 136
taxes 114, 140-41, 149-51, 157, 165, 168, 175, 178, 180, 182, 185
temples, artisans and 158-59, 183-84; bronzes from 128; as centres of consumption 157, 183-85; donation of towns and shops to 140-41; early medieval 131, 164; economic activities of 131, 183; land grants to 164-65, 183; management of villages, granted to 141-42; offering of seals at 125; royal patronage to 129; as self-sufficient economic units 165; subinfeudation in establishments of 159-60; transfer of taxes to 165; and "new urban" phenomenon 177; *see also* artisans, land grants, feudalism, monasteries, urban decline
terracottas 24-26, 28, 31, 33, 36-37, 39, 40-42, 46, 48, 51, 53, 55, 56, 58, 61, 63, 65-68, 70-71, 73-74, 77, 79, 82, 87, 90-91, 99, 101, 103-4, 106; as a trait of early historic urbanism 4-8, 122f; in early medieval times 126; regionalisation in 126; reduced use of 130; urban milieu and 179; *see also* artisans, beads, trade
textile 12, 82; industry at Rajghat 35 and Uraiyur 104; technology 178; trade in 137, 149, 182; workers 145, 150; *see also* dyeing vat, muslin, silk
Tiberius 77, 81, 86, 99
tiles 6, 10, 12, 24, 26, 58, 75, 78, 80, 84, 90, 96, 106
tin 128, 138, 145, 155
towns, brāhmaṇas migrate from 183; Buddhist and Sanskrit texts on 160; and Buddhism 161-62; as centres of exchange, production and technology 148-50, 167, 182-85; in classical antiquity 149; contraction of 172-77; changes in the social composition of 155-58; their decay and emergence of feudalism 166-67, 182-83; dispersal of crafts and luxuries of 154-55, 166-67; early historic towns 148-49; grant of 139-41, 182-83; feudalisation of 141, 153f, 182-83; in feudal society 149, 166-67; and land grants 140-41, 165-67, 182-83; *Milinda-Pañho* on ideal 148; migration of artisans and merchants from 153-55, 166-67, 183; *Mānasāra* on the planning of 117-18, 155-57; population of 143f;

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peak of growth in 178; not parasitic 149; as source of state income 149-50; relation with villages 155-57; see also artisans, de-urbanization, feudalism, trade, urban centres, urban decline, urbanization
trade, Arab records on 124; in beads 9, 127, 129, 137, 149; in bronze 128-29; with Central Asia 8, 35-36, 73, 135, 178; coins and 124-25, 138; commodities in 117, 128-29, 136-38, 149, 182; customs imposition and 180; decline of 108-14, 117, 127, 135f, 182f, and urban decay 135f, 157, 182f, in foodgrains 128; foreign coins and 129-30, 138; gift exchange as substitute for 157-58; and feudal polity 117, 140-41, 175, 183; in horse 128; stagnant land prices and 109; Indo-Roman 2, 6, 8-9, 35-36, 71-74, 76-77, 79, 81-82, 84-107, 129, 135f, 178, 180-82; in Indian ivories 8, 127; in lead 50; under the Kuṣāṇas 8, 26; in Gupta and post-Gupta times 129-30; pottery and 126; in silk 135, 136-37, 182; sericulture and 137, 182; in terracottas 126; in textiles 137; in tin 138; with Byzantium 182, China 182, Middle East 124, 137, South-East Asia 8-9, 116, 127, 137-38, 182, the Southern Seas 138, Sri Lanka 182, North Africa 137, Western Asia 8; Indian exports 137; temples, monasteries and 157; and taxation 149-52; and internal distributive system 182-83; and urbanism 8, 78, 100, 126, 135f; routes 11, 26, 63, 64, 77, 82, 83, 135-36, in Gujarat 71-74, Karnataka 85-87, Maharashtra 71-74; inscriptional evidence on history of 108-9; seaborne 160-61; and internal situation in Rome 181; urbanization and long-distance 179-80, 182; not a factor in state formation in early medieval India 175; revival after Turkish invasion 133; political power and 134f; *see also* artisans, Byzantine, Chinese, coins, Guptas, Kṣatrapas, Kuṣāṇas, merchants, monasteries, pottery, Roman empire, Sātavāhanas, urban centres, urban decline
Turkish invasions 133

Ucchakalpa 141
Udayamāna 153
untouchables 154-57
urban centres, administration of 108-9; destruction of people residing in 111-13; as city states 116; in Jain texts of early medieval times 115-17; in texts on architecture 117-18; distinction between village and 117; artisanal and commercial aspects of 118; in pre-Kuṣāṇa times 120; and pottery 125-26; their decay after the Sātavāhanas 132f, thrive despite post-Maurya political fragmentation 134f; social upheavals and decay of 139f; grants of 139-40; and feudalism 140-41; parasitic sections of 143-44; generative side of the economy of 144f; composition of the population of 143f; de-urbanization and people of 152-53; ruralization of 155-57, 165f; Buddhist and Sanskrit texts on 160; and Buddhist monasteries; their contraction and agrarian expansion 172-77; their decline after the Kuṣāṇas and the Sātavāhanas, *passim*; and state formation 182-83; and rise of capitalism 183; *see also* trade, urban decline, urbanization, Kuṣāṇas, Guptas, Sātavāhanas
urban decline 4, 8, 10; and trade 8-9; in north India 27; in middle Gangetic plains 59; in eastern regions 59; in central India and western India 83, 132-33, 160-61; in Gujarat 83, 132; in Maharashtra 83, 132, 160-61; in Rajasthan 60-62, 132; in Madhya Pradesh 83, 132; in Karnataka 86-87; in Andhra Pradesh 100; in Tamil Nadu 106-7; under the Guptas 109f, 132f; Varāhamihira on 109-14; mercantile loss and 112-14, 181; Hsüan-Tsang on 118-19; Arab geographers on 119-21; marks transition from antiquity to Middle Ages 120; coinage and 124-25; in

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post-Gupta times 122f; disappearance of fine pottery and 126, 181; explanation of 132-41; after the Sātavāhanas 132, 134f, 180; after the Kuṣāṇas 134f, 180f; in the Deccan 132f, 180f; long-distance trade and 138, 180f; deforestation and 138; Kali social upheaval and 139-42, 181-83; social significance of 143f, 158-59; and taxation 151-52; generated scorn for artisans 153-54; and demonetization of economy 158-59, 166; and ruralisation of artisans' occupations 158-59, 165-67; strengthened agrarian economy 165-67, 184-85; its impact on social relationships 165-67; and feudalism 167; 182-83; and agrarian expansion 172-77, 184-85; not equated with contraction of economy 175, 184-85; first stage of 180; second stage of 181-85; and guilds 183; and loss of state income 183; and tax-rent relationship 185

anization traits of 4-8, 122-31; in Iron Age 4; early historic 2f; climate and 4-5; quality of material life and 5-8; Harappan 6; pre-industrial 6; textual evidence on 7; Chinese pilgrims on 7-8; vertical excavations and 7-8; pre-Kuṣāṇa 120; in north India 10-27; 120-21, 135 under the Kuṣāṇas, *passim*; in Pakistan in early historic times 10-13; in Punjab and Haryana 14-20; in western Uttar Pradesh 20-27; in middle-Gangetic plains 28f; in western region 57-59; in Rajasthan 60-62; 120-21, 135; in Madhya Pradesh 62-71, 83; in Gujarat 71-74, 83, 120-21, 135; in Maharashtra 74-83; under the Sātavāhanas 74-83; in Karnataka 84-87; in Andhra Pradesh 87-100; in Tamil Nadu 100-7; absent in Kerala 106; case for third, 115; Arab geographers on 120-21; coinage and 124-25, 157; pottery and 126; in classical antiquity 136, 139, 149; agricultural surplus and 138; and rural hinterland 138-39; seaborne commerce and 160-61; and early Buddhism 161-62; "new urban" phenomenon 177; and art forms 179; mild renewal of 185; *see also* artisans, coins, Kṣatrapas, Kuṣāṇas, merchants, Sātavāhanas, towns, urban centres, urban decline

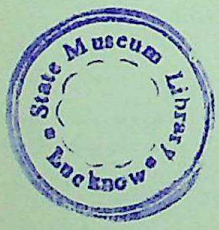
vaiśyas 111, 153, 156, 175
vajrāsana 163
Vākāṭaka(s) 75, 133, 154-55, 168-69
Varaguṇa 164
Vāsudeva 16, 21, 25, 57, 62
Vigrahapāla 123
Vijayanagara 99, 100, 104
Vijayapurī, capital of the Ikṣvākus 90
villages, as objects of land grants 168-69, 183; agricultural products of 169; linguistic study of names of 169; medieval literary evidence on founding of 171-72; and status of king 171; rural population 172; extension of 171-77; collective identity of 177; granted to brāhmaṇas 183
Vima Kadphises (II) 13, 15, 31
Viṣṇu 58, 74
Viṣṇukuṇḍins 75, 90
Vṛṣṇikula 164

Wadeyars, of Mysore 86
warriors, as non-productive sector in towns 143-44; specialised categories of 144; and townspeople 150-51; as town dwellers, 152-53
wheat 81-82

Yādavas 79
Yajña Śrī Śātakarṇi 97
Yaudheyas, their coin moulds from Sunet 16; coins from Hastināpur 21 and Purana Qila 20; fall of 114; *see also* coins

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A former professor of history at Patna and Delhi universities and the first chairman of the Indian Council of Historical Research, R.S. Sharma has played a leading role in the reconstruction of the social and economic history of early India. His publications include *Aspects of Political Ideas and Institutions in Ancient India* (2nd edn, 1968), *Social Changes in Early Medieval India* (1969, reprint 1981), *In Defence of 'Ancient India'* (1979, reprint 1981), *Sudras in Ancient India* (2nd edn), *Indian Feudalism* (2nd edn, 1980, 1985). *Perspectives in Social and Economic History of Early India* (1983) and *Material Culture and Social Formations in Ancient India* (1983, 1985). His *Ancient India* (1977) was withdrawn in 1978 under the pressure of obscurantist elements, but reappeared in a second edition in 1980. Professor Sharma's writings appear in several Indian and foreign languages.

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